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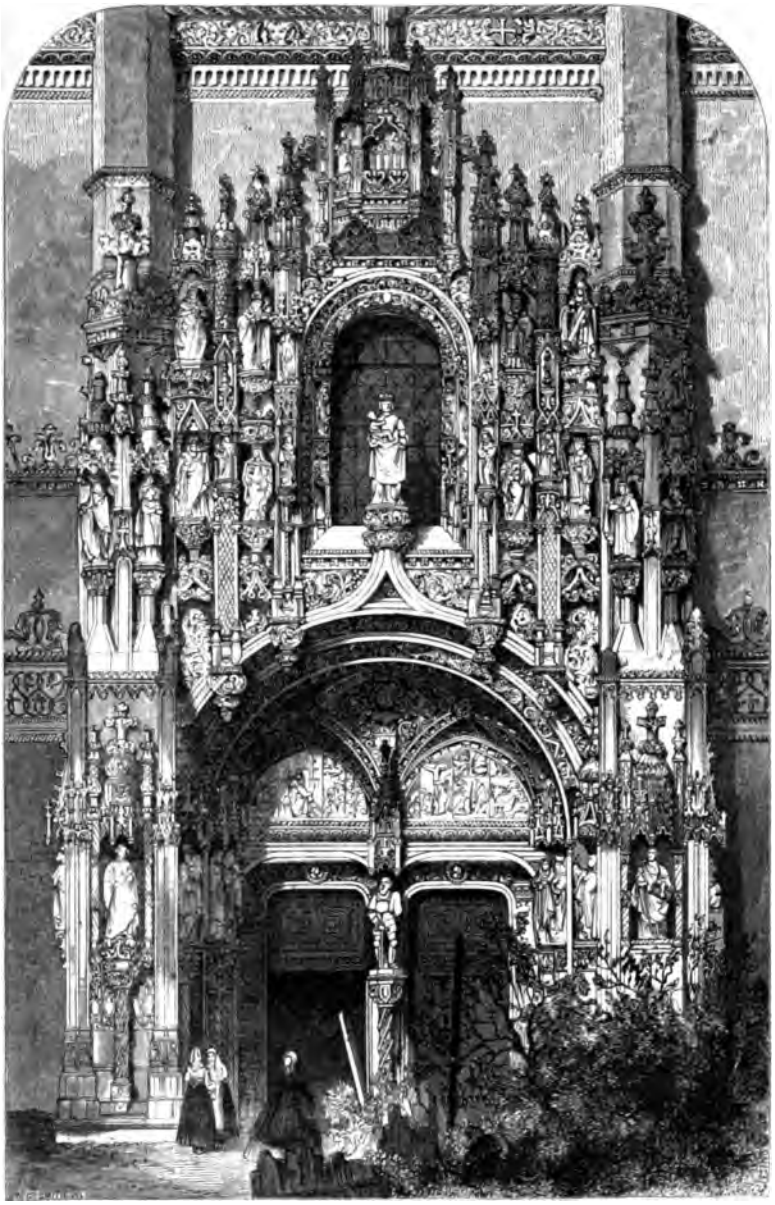

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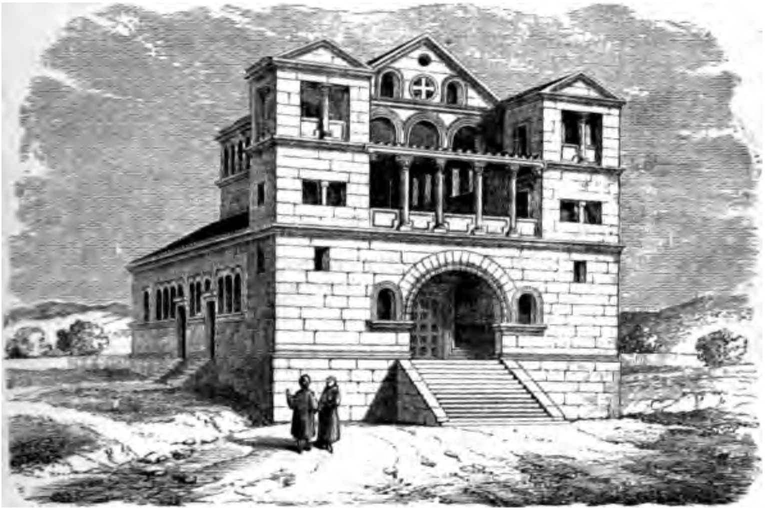
A

HISTORY OF ARCHITECTURE

IN ALL COUNTRIES,

FROM THE EARLIEST TIMES TO THE PRESENT DAY.

By JAMES FERGUSSON, D.C.L., F.R.S., M.R.A.S.,
FELLOW ROYAL INST. BRIT. ARCHITECTS,
&c. &c. &c.



Façade of Church at Tourmanim.

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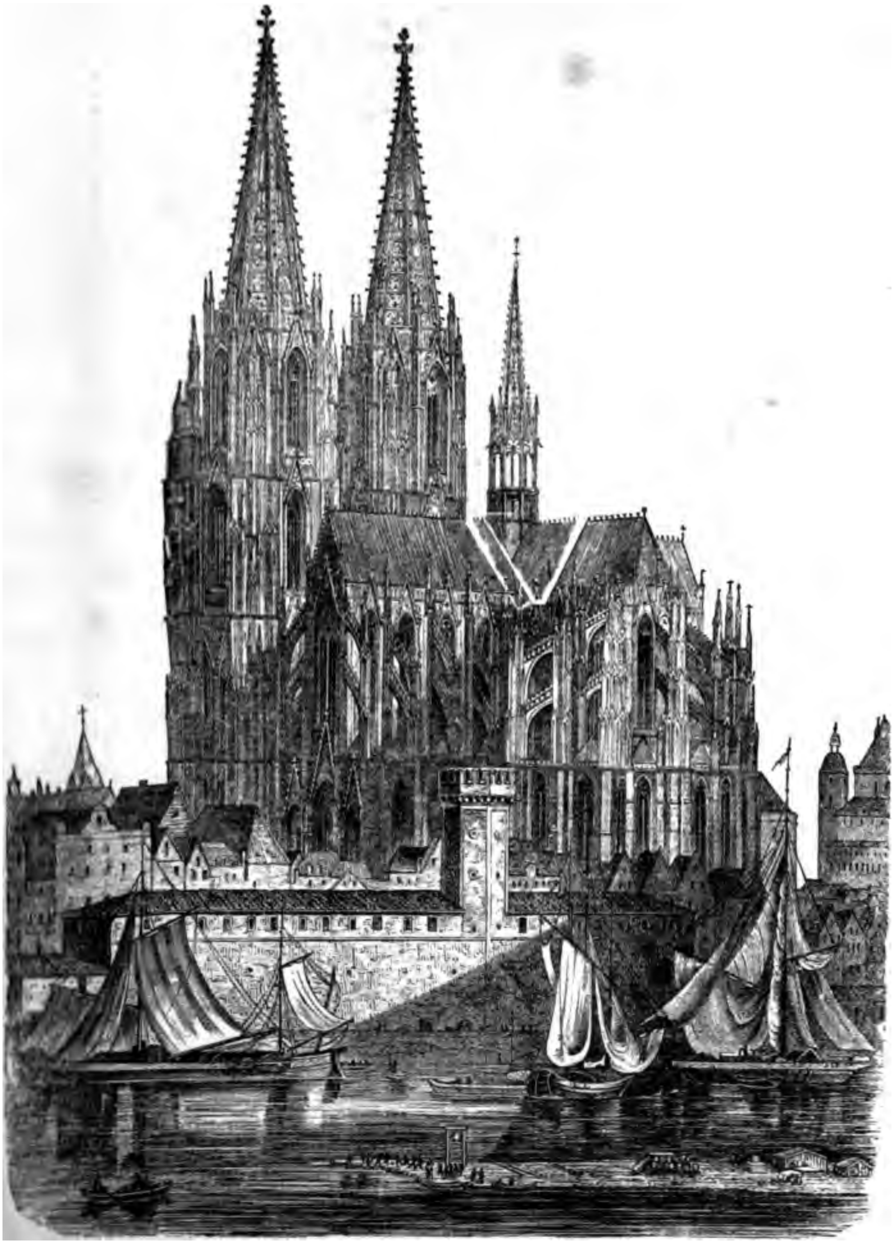

VIEW OF COLOGNE CATHEDRAL.
As it will appear when completed.

(From Rosengarten.)

HISTORY OF ARCHITECTURE.

PART II.—CHRISTIAN ARCHITECTURE.

(Continued.)

BOOK IV.

GERMANY.

CHAPTER I.

INTRODUCTORY.

CONTENTS.

Historical notice — Circular churches — Aix-la-Chapelle — Nimeguen — Bonn

CHRONOLOGY.

	A.D.		A.D.
Charlemagne	768 to 814	Conrad III., Hohenstaufen	1138
Conrad I. of Franconia	911	Frederick Barbarossa	1152
Henry the Fowler	918	Henry VI.	1190
Otho I., or the Great	936	Frederick II.	1212
Otho II.	973	Conradin	1250
Otho III.	983	Rudolph of Hapsburgh	1273
Henry II.	1002	Albert of Austria	1298
Conrad the Salique	1024	Louis of Bavaria	1314
Henry III.	1039	Charles of Luxemburg	1347
Henry IV.	1056	Frederick IV.	1440
Henry V.	1106	Maximilian I.	1493
Lothaire II.	1125	Charles V.	1519 to 1557

As might be expected from the known difference of race, the history of architecture in Germany differs in the most marked degree from that of France; and instead of a number of distinct nationalities being gradually absorbed into one great central despotism, and their individuality obliterated, as happened in that country, we find Germany commencing as a great united power under Charlemagne and the Othos, but with a strong tendency to disintegration from first to last.

Had the Germans been as pure Aryans as they are sometimes supposed to be, they might under certain circumstances have resolved themselves into an aggregation of village communities under one paramount protector. The presence of a Celtic dominion on their western frontier, always greedy for territory, and always prepared to fight either for its acquisition, or for anything else, prevented such a catastrophe as this. But the tendency in those parts of Germany where the blood was purest was towards every city becoming an independent community, every trade an independent guild, and every lordship a little kingdom in so far as independence was concerned. All this, however, was the natural tendency of the race, and by no means involved the cutting up of the country into separate architectural provinces. Had the country indeed been divided into 1000 or 1500 separate principalities and free cities, instead of one-tenth of that number, the uniformity would have been greater than it is, and from the Alps to the Baltic we should have had only one style, as was very nearly being the case during the Middle Ages. The greatest difference that strikes the observer at first sight, is the change of style between the buildings on the banks of the Rhine and those on the shores of the Baltic. This, however, is more superficial than real, and arose from the fact of no stone being found on the sandy plains of Prussia. The inhabitants of Northern Germany were forced to use brick, and that only, and consequently employed forms which were different from those used in stone countries, but varying from them constructively more than essentially. There may nevertheless be a certain infusion of Wendish blood in Northern Germany, which may to some extent have influenced the style, but it is not easy to trace or isolate it.

On the eastern boundary of the province a well-marked ethnographic distinction may easily be detected. In Bohemia and Moravia a strong infusion of Sclavonic feeling does tincture the art, but not to its advantage. In these countries there are some very grand Gothic buildings; but they are wild and ill-understood as Gothic designs, and by no means satisfy the judgment of any one who is familiar with the best examples in France or England. In Siebenburgen,[1] as might be expected, the style is still more abnormal, but it would take more trouble and more illustration to describe it than its importance deserves; for, except the cathedral at Karlsburg, it does not possess any building of great architectural magnificence. Its general characteristic is that it is more Italian than German, though not the less interesting for that very reason.

The history of Gothic architecture in Germany began practically with Charlemagne and ended with Charles V. There may be some buildings erected before the date of the first-named king, but, if so, they are small and unimportant, and indeed it seems probable that the edifices left by the Romans sufficed for the early wants of the people. Some of these, like the church at Treves, were built for Christian purposes; while others may have been in wood and have perished. Be that as it may, however, from the time of Charlemagne we can trace the history of the style with tolerable distinctness. A considerable impulse was given to it under the Othos (936–1002), and under the Hohenstaufens (1138–1268) the old round-arched style reached its culminating point of perfection. If any style deserves the name of German it is this, as it was elaborated in the valley of the Rhine, with very little assistance from any other nation beyond the hints obtained from the close connexion that then existed between the Germans and the inhabitants of the valley of the Po.

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[1] See two papers on this subject in 'Jahrbuch der Central Commission zur Erhaltung der Baudenkmale,' vol. ii. p. 65, and vol. iii. p. 149.

With the house of Hapsburg (1273) a change came over the spirit of the country. What Germany did in the 18th century was only a repetition of what she had done in the 13th. At the latter epoch she abandoned her native literature, almost her mother tongue—to speak French and to copy French fashions, as at the earlier epoch she forsook her own noble style of art to adopt the French pointed Gothic. Had she thoroughly understood and appreciated the French style, it might have been as well; but it was foreign to her tastes, she had never worked it out from the beginning, and it soon in consequence became exaggerated, and finally degenerated into a display of tricks and *tours de force*.

By a strange perversion of historical evidence, the Germans have attempted of late years to appropriate to themselves the credit of the invention of the pointed style, calling it in consequence German architecture. The fact being that the pointed style was not only invented but perfected in France long before the Germans thought of introducing it; and when they adopted it, they did so without understanding it, and fell far short of the perfection to which it was carried by the French in all the edifices which they erected in the age of its greatest development in their own country.

On the other hand, the Germans may fairly claim the invention of the particular style which prevailed throughout Lombardy and Germany of which we are now speaking. This style, it is true, never was fully developed, and never reached that perfection of finish and completeness which the pointed style attained. Notwithstanding this, it contained as noble elements as the other, and was capable of as successful cultivation, and, had its simpler forms and grander dimensions been elaborated with the same care and taste, Europe might have possessed a higher style of Mediæval architecture than she has yet seen. The task, however, was abandoned before it was half completed, and it is only too probable now that it can never be resumed.

A complete history of this style, worthy of its importance, is still a desideratum which it is to be hoped the zeal and industry of German architects will ere long supply, and vindicate their national art from the neglect it now lies under, by illustrating as it deserves one of the most interesting chapters in the history of architecture.[1] Already German writers seem to be aware that the age of the Hohenstaufens was not only the most exclusively national, but also the most brilliant period of their history. Its annals have engaged the pens of their best historians, and its poetry has been rescued from obscurity and commented upon with characteristic fulness. Every phase of their civilisation has been fully illustrated, except one—that one being their architecture, which is, however, the noblest and the most living record of what they did or aspired to do, that could be left for their posterity to study. So distinctly is it their own, that, were it necessary to find for it a separate name, the style of the Hohenstaufens would be that which would most correctly describe it.

The leading characteristics of the German style are the double apsidal arrangement of plan, the multiplication of small circular or octangular towers, combined with polygonal domes, at the intersections of the transepts with the nave, and the extended use of galleries under the eaves of the roofs both of the apses and of the straight sides. The most ornamental parts are the doorways and the capitals of the columns. The latter surpass in beauty and in richness anything of their kind executed during the Middle Ages, and, though sometimes rude in execution, they equal in design any capitals ever invented. These only required the experience and refinement of another century of labour to qualify them to compete successfully with any parts of the pointed style of architecture which they borrowed from the French, and which in the course of time entirely superseded their own native style.

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[1] The work of F. Osten on the architecture of Lombardy, and that of Geier and Görtz on the style in the Rhine country, combined with the works of Boisserée, have already furnished considerable materials for such a history. Both these first-named works were left incomplete, the former from the death of the author, the latter owing to the late troubles of the country.

CHAPTER II.

BASILICAS.

CONTENTS.

Plan of St. Gall — Church at Reichenau — Romain-Motier — Granson — Church at Gernrode — Trèves — Hildesheim — Cathedrals of Worms and Spires — Churches at Cologne — Other churches and chapels.

St. Gall.

As just mentioned, the history of Gothic architecture in Germany commences practically with Charlemagne; and, by a fortunate accident, we are able to begin our account of it by quoting from a contemporary illustration of the greatest interest and importance. In the library of the monastery of St. Gall, in Switzerland, a manuscript plan of a great monastic establishment was found by Mabillon in the 17th century, and published by him in the second volume of the 'Annals of the Benedictine Order.' The name of the author is not known; but, from some dedicatory verses on the back, it appears certain that it was sent to Gospertus, who was abbot of the monastery, in the beginning of the 9th century, and who in fact rebuilt the church and part of the monastic buildings between the years 820 and 830. Mabillon conjectures that the plan was prepared by Eigenhard, the friend of Charlemagne, and who was also the director of his buildings. It is by no means improbable that this may have been the case, though it does not seem possible to prove it.

It is a matter of extreme difficulty to decide how far this plan was followed in the erection of either the church or monastery of St. Gall at this remote period, for everything there has been altered at subsequent times; nor is it very important to enquire. The plan does not pretend to represent any particular establishment, but is a "projet" of what was then considered a perfect monastery. In this respect it resembles the plans of fortified towns which are engraved in our books of fortification representing the systems of Vauban, Coehorn, Montalembert, &c., and which, though applicable *mutatis mutandis* to every place, have never literally been carried out in any one. It is in fact an illustration of the Benedictine system, as applicable to Germany in the ninth century, in its completed and most perfect form, and on this account is far more interesting to us than if it had been merely a plan of any particular monastery.

The plan itself is on two sheets of parchment, and is so large (3½ by 4½ ft.) that only a small portion of it can be reproduced here, and that on a reduced scale.

The whole group of buildings was apparently meant to occupy a space of about 450 ft. by 300. On the north side of the church (A A) was situated the abbot's lodging (B), with a covered way into the church, and an arcade on either face: his kitchen and offices being detached, and situated to the eastward. To the westward of this was the public school (C), and still farther in the same direction the hospitium or guest-house (D D), with accommodation attached to it for the horses and servants of strangers.

Beyond the abbot's house to the eastward was the dispensary (E), and beyond that again the residence of the doctor (F), with his garden for medical herbs and simples at the extreme corner of the monastery.

To the eastward of the great church was situated another small double-apse church (G G), divided into two by a wall across the centre.

On either side of this church was a cloister, surrounded by apartments: that on the north was the infirmary, next to the doctor's residence, and to it the western portion of the chapel was attached. The other was the school and residence of the novices. Beyond these was the orchard (H), which was also the cemetery of the monks; and still farther to the southward were situated the kitchen-garden, the poultry-yard, the granaries, mills, bakehouses, and other offices. These last are not shown in the woodcut, for want of space.

On the south side of the church was situated the great cloister (I), and further to the south of this was the refectory (J), with a detached kitchen (K), which also opened into the great wine-cellar (L); and opposite to this was the dormitory (M), with its various dependent buildings.

To the westward was another hospitium (N), apparently for an inferior class of guests; and to the southward and westward (O O) were placed the stables for horses, cattle, sheep, and all the animals required for so large an establishment, the whole arranged with as much skill and care as can be found in the best modern farms.

The principal point of interest is the church, which was designed to be 200 ft. long from east to west and 80 ft. in width, divided into three aisles by two rows of columns; the centre aisle being 40, the outer each 20 ft. in width. It has two apses; the principal one towards the east has a vaulted crypt, in which is a confessio, meant to contain the relics of the patron saint, St. Gall. In front of this is a choir, arranged very much on the model of that of S. Clemente at Rome, before described.[1] The western apse, on the same level as the floor of the

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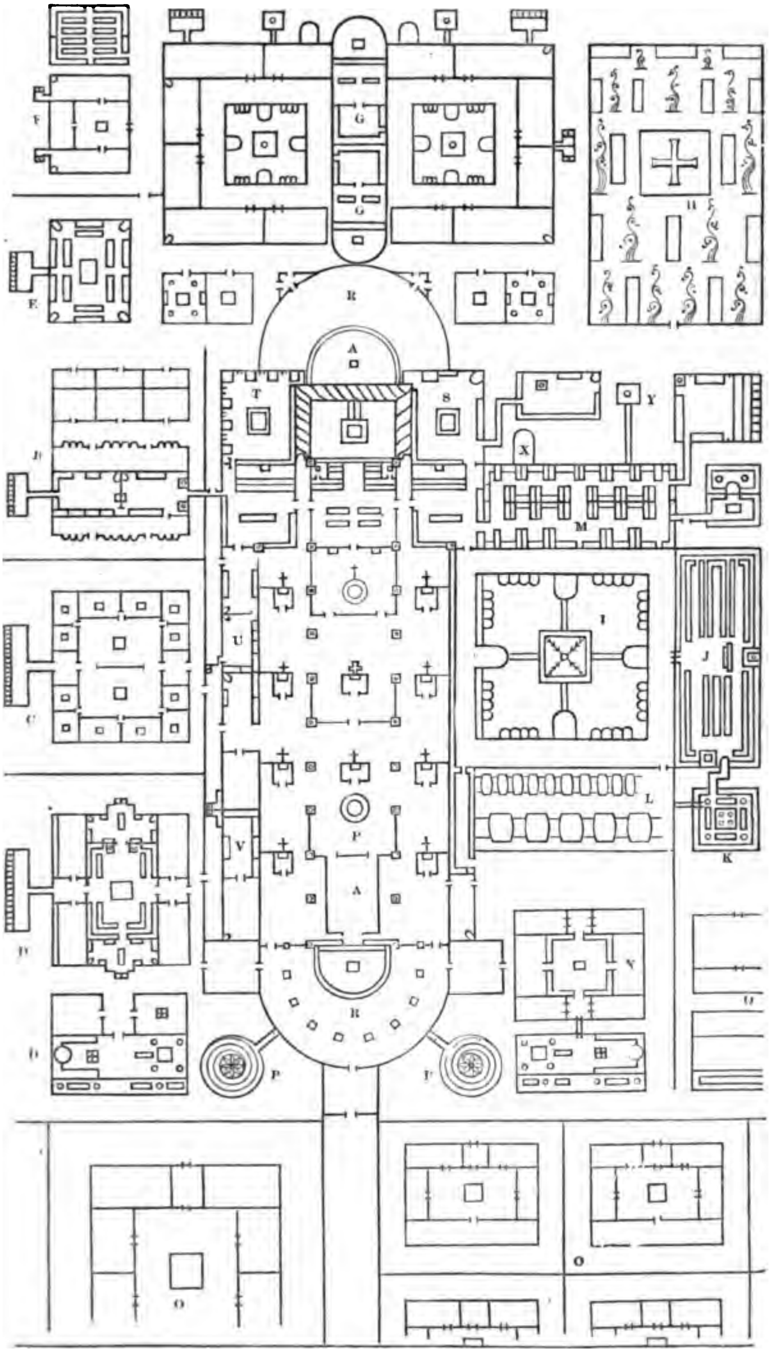
[1] See vol. i. p. 408.



451. **Reduction of an Original Plan of a Monastery at St. Gall.**

church, was to be dedicated to St. Paul, and the eastern one to St. Peter. Between the two choirs is the font (P) and the altar of St. John the Baptist, and on each side are a range of altars dedicated to various saints. Behind both apses are open spaces or paradises (R R) (parvis), that to the west is surrounded by an open semicircular porch, by which the public were to gain access to the church; and on either side of this, but detached, are two circular towers, each with an altar on its summit, one dedicated to the archangel Michael, the other to Gabriel: these were to be reached by circular stairs or inclined planes. No mention is made of bells, and the text would seem to intimate rather that the towers were designed for watch-towers or observatories. The similarity of their position and form to that of the Irish round towers is most remarkable; but whether this was in compliment to the Irish saint to whom the monastery owed its origin, or whether we must look to Ravenna for the type, are questions not easily determined at the present date, for we know far too little as yet of the archæology of the age to speak with certainty on any such questions. It is by no means improbable that the meaning and origin of these and of the Irish towers were the same; but whether it was a form exclusively belonging to a Celtic or Irish race, or common to all churches of that age, is what we cannot now decide from the imperfect data at our command.

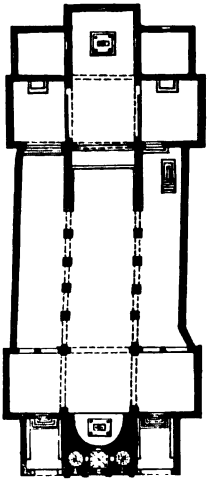
On either side of the east end of the church is an apartment, where the transept is usually found; that on the south is the vestry (S); on the north is the library (T), and attached to the church on the same side is the schoolmaster's house (U), and beyond that the porter's (V).

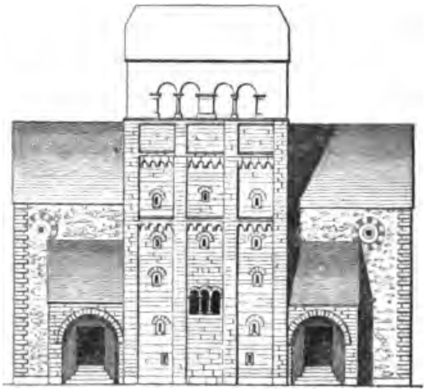
All the living-apartments have stoves in the angles, but the dormitory has a most scientific arrangement for heating; the furnace is at (X), and the smoke is conveyed away by a detached shaft at (Y); between which there must have been some arrangement of flues beneath the floor for heating the sleeping-apartment of the monks.

Were it not that the evidence is so incontrovertible, we should feel little inclined to fancy that the monasteries of this dark age showed such refinement and such completeness as is here evidenced; for at no period of their history can anything more perfect be found. In the church especially, the two apses, the number of altars, the crypt and its accompaniments, the sacristy, the library, &c., many of which things have generally been considered as the invention of subsequent ages, are marked out distinctly and clearly, as well-understood and usual arrangements of ecclesiastical edifices. This plan in fact refutes at once all the arguments regarding the dates of churches which have been founded on the supposed era of the introduction of these accessories.

By another fortunate coincidence there is a church still standing on the Island of Reichenau, in the lake of Constance, within thirty miles of St. Gall, which certainly belongs to this date, and is unaltered in nearly all its principal features. It was finished, or at least dedicated, in the year 816, and therefore this event took place just before the rebuilding of St. Gall commenced.[1]

As will be seen from the plan (Woodcut No. 452) the dimensions of the two churches are nearly the same; on the St. Gall plan they are written 200 ft. by 80. This church is 230 by 83 English feet, but the eastern[2] apse has been rebuilt on a more extended scale, and if we restore its original circular form, we bring its dimensions so nearly to those of the St. Gall plan, that, if its author used what we now know as French feet, the dimensions of the two may be considered as identical. The pier-arches of the nave are plain, and the whole arrangement is not unlike that of the nave of Mortier en Der (Woodcut No. 376). One of the most remarkable peculiarities of the Reichenau church is the door behind the altar in the western apse, and the great window looking into it, with double stairs which lead up to it, as though the bishop's throne was placed there above the heads of all. The two principal entrances were, as shown in Woodcut No. 453, on each side of the western apse, and the whole of the elevation—in so far as it is preserved—retains the original design of the 9th century. Although retaining the wooden roof, and never apparently intended to be vaulted, this church is essentially Gothic in all its details. There is not a classical feature about it, and we are rather startled to find the Barbarian style so complete at so early an age, and so far removed from anything that could with propriety be called Romanesque.[3]


452. Plan of Church at Reichenau.
Scale 100 ft. to 1 in.


453. Elevation of West End of Church at Reichenau.
Scale 50 ft. to 1 in.

There are other churches in this neighbourhood scarcely less ancient in date than this one at Reichenau, and almost as interesting in their arrangement. Among these may be mentioned that of Romain-Motier, the body of which certainly remains as it was when consecrated in the year 753. The narthex, which is in two storeys, may be a century or two later, and the porch and east end are of the pointed style of the 12th or 13th century. The vaulting of the nave also can hardly be coeval with the original building.

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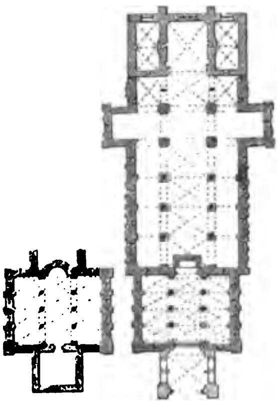
[1] All the particulars regarding this church are taken from Hubsch, 'Altchristliche Bauwerke,' pp. 109, xlix.

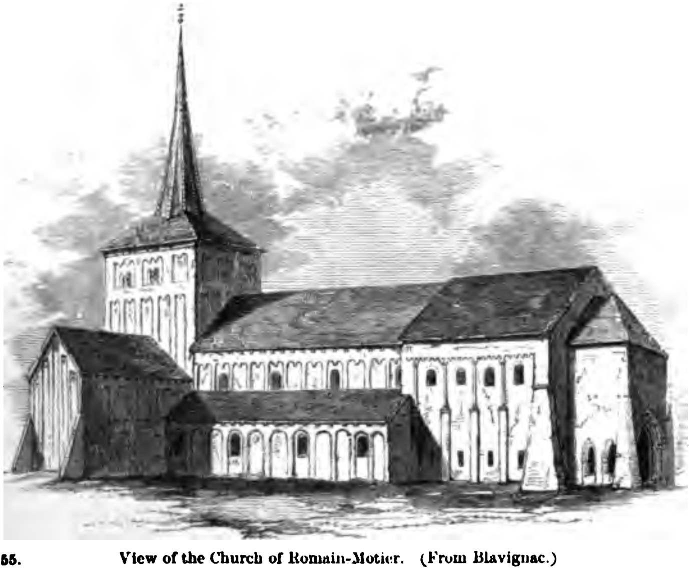
[2] That shown in the woodcut is a suggestion of Dr. Hubsch.

[3] If there are any remains of the monastic buildings at Reichenau it is extremely desirable that they should be examined, in order to see how far they accord with the St. Gall plan. What if it should turn out to be a perfected plan of Reichenau sent after its completion by the abbot Heiton to his friend Gospertus?


454. Plan of the Church at Romain-Motier. (From Blavignac.[1]) Scale 100 ft. to 1 in.

From other examples in the neighbourhood, we may safely infer that it originally terminated eastward in one or three apses. Supposing these to be restored, we have a church of about 150 ft. in length by 55 in width across the nave, with transepts, a tower at the intersection, and nearly all the arrangements found at a much later age, and with scarcely any more reminiscence of the Romanesque style than is observable at Reichenau.

The external mode of decoration is very much that of the two churches of San Apollinare at Ravenna, but is carried one step further, inasmuch as in the upper storey of the nave each compartment is divided into two arches, with no central support; in the tower there


455. View of the Church of Romain-Motier. (From Blavignac.)

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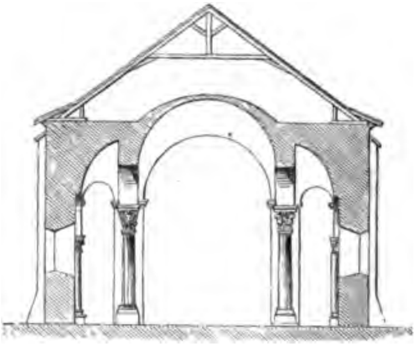
[1] 'Histoire de l'Architecture Sacrée du 4^{me} au 10^{me} Siècle dans les Évêchés de Genève, Lausanne, et Sion,' 1853.

are three such little arches in each bay, and in the narthex five. This design afterwards became in Germany and Italy the favourite string-course moulding.



456. Section of Church at Granson. (From Blavignac.)

The church of Granson, on the borders of the lake of Neufchatel, though much smaller, is scarcely less interesting. It belongs to the Carlovingian era, and like many churches of that age, has borrowed its pillars and many of its ornaments from earlier monuments. Its most remarkable peculiarity is the vault of the nave, which shows how timidly at that early period the architects undertook to vault even the narrowest spans, the whole nave with its side-aisles being only 30 ft. wide. It is the earliest specimen we possess of a mode of vaulting which subsequently became very common in the South of France, and which, as has been pointed out above, led to most of the forms of vaulting afterwards introduced.

The church of Notre Dame de Neufchatel, part of which is as old as from 927 to 954, presents also forms of beauty and interest. The same may be said of the tower of the cathedral of Sion, which is of the same age, and of parts also of the cathedral of Geneva.

The church at Payerne is very similar in size and in all its arrangements to that of Romain-Motier; but being two centuries more modern, the transition is complete, and it shows all the peculiarities of a round-arched Gothic style as completely as San Michele at Pavia, or any other church of the same age.

If there are any examples of basilican churches in Germany as old as these Swiss examples, they have not yet been described, nor their age satisfactorily ascertained. The oldest known example, so far as I am aware, is the old Dom at Ratisbon,[1] originally apparently about 40 ft. by 20 over all. It was surrounded internally by eleven niches, and vaulted. It also possessed the peculiarly German arrangement of having no entrance at the west end, but with a deep gallery occupying about one-fourth of the church. The lateral entrance is unfortunately gone, so that there is very little ornamental architecture about the place by which its age could be determined; and as no record remains of its foundation, we can only conjecture that it may belong to some time slightly subsequent to the Carlovingian era.[2]

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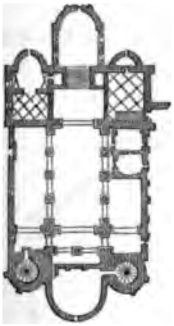
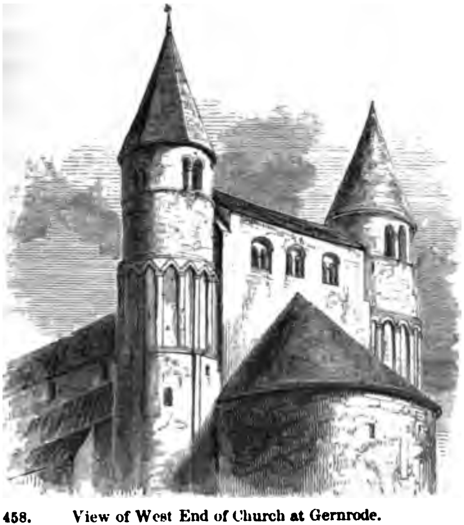
[1] Kallenbach, 'Deutsch Baukunst,' pl. 1.

[2] At Aquileja, at the upper end of the Adriatic Gulf, Poppo, the archbishop, between the years 1019–1042, erected a building almost identical with this in every respect between the old basilica and

Boisserée places in this age the original cathedrals of Fulda and Cologne, both which he assumes to have been double-apse basilicas, but apparently without any sufficient data. There is no doubt that the cathedral at the latter place, burnt in 1248, was a double-apse church; but if it was anything like his restoration it could not have been erected earlier than the 11th or 12th century, and must have replaced an older building, which, for anything we know, may have been circular, as probably as rectangular; and such would likewise appear to have been the case at Fulda, though there is as little to reason upon there as at Cologne.


457. Plan of the Church at Gernrode. (From Puttrich.[1])

Leaving these somewhat apocryphal examples, we must come down to the end of the 10th or beginning of the 11th century for examples of the class we are now speaking of. Of these, one of the most perfect and interesting is the church at Gernrode, in the Hartz, founded A.D. 960, when probably the eastern part (not the extended choir) was commenced, and the whole building may be assumed to have been erected within a century after that date. From the plan (Woodcut No. 457) it will be seen how singularly like it is to the St. Gall example, except that it appears to have been originally about 50 ft., or one-fourth less in length. The western circular towers, instead of being detached, are here joined to the building. Piers too are introduced internally, alternating with pillars; and altogether the church shows just such an advance on the St. Gall plan as we might expect a century or so to produce. It exemplifies most satisfactorily the original form of these churches.


458. View of West End of Church at Gernrode. (From Puttrich.)

It possesses what is rare in this country—a bold triforium gallery, and externally that strange frontispiece, forming the connecting gallery

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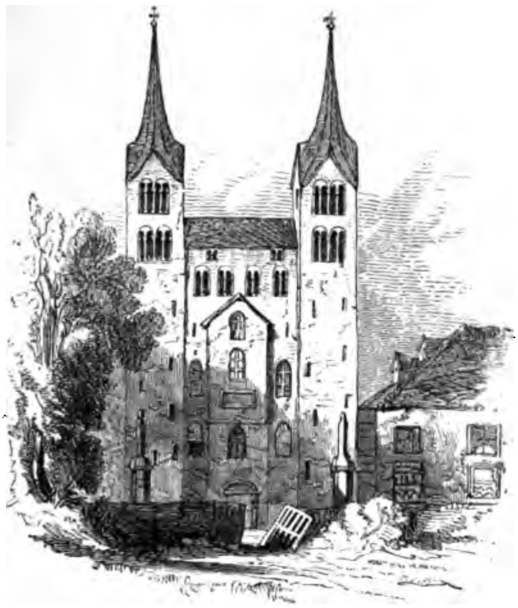
the baptistery, so as to make a double-apse church out of the old Romanesque arrangement. The similarity of the two buildings may probably bring down the date of that at Ratisbon to the 10th century.

[1] 'Baukunst des Mittelalters in Sachsen.'

of the two towers, which is so distinguishing a characteristic of German churches. A still bolder example of this gallery remains in the façade of the once famous abbey of Corvey, on the eastern frontier of Westphalia (Woodcut No. 459), where we find the feature developed to its fullest extent, so that it must originally have entirely hidden the church placed behind it, as it did afterwards at Strasbourg and in many other examples.

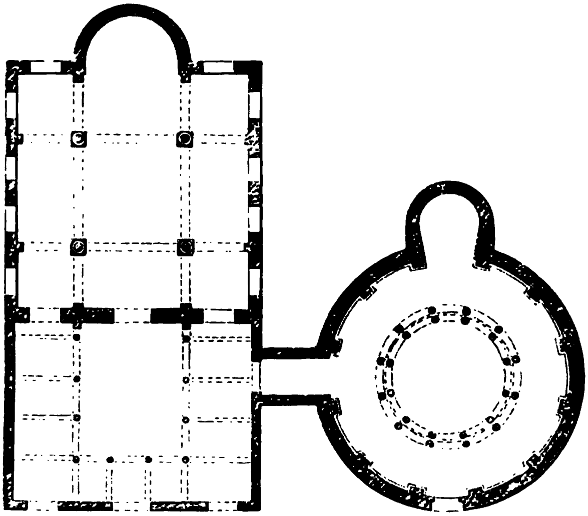


459. View of West End of Abbey of Corvey.

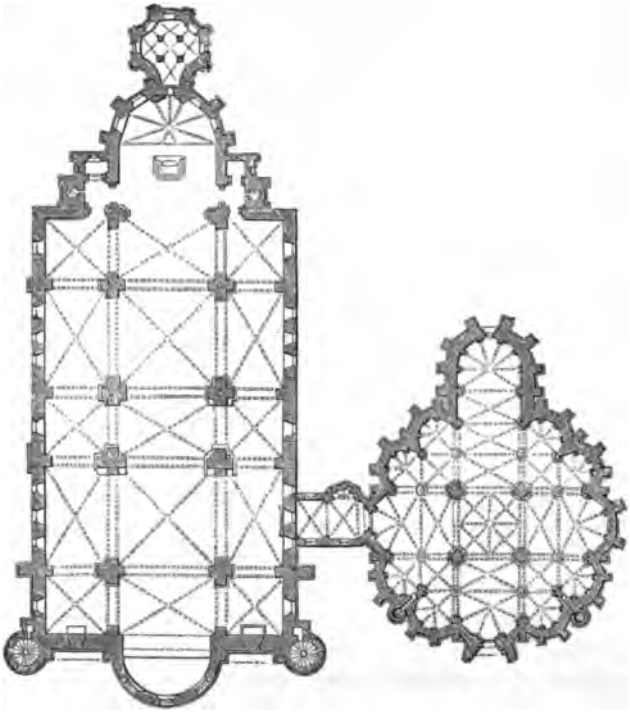
At Gernrode, as at Reichenau, the roof was originally intended to have been of wood, the crypts under the two apses being alone vaulted. Indeed at that age the German architects hardly felt themselves skilled enough to undertake a stone roof of any great extent. The old Dom at Ratisbon is only 13 ft. in width, and that they could accomplish, but not apparently one like Gernrode, where the span was twice that in extent.

If the church at Gernrode is a satisfactory specimen of a complete German design carried out in its integrity, the cathedral at Trèves is both more interesting as well as instructive from a very different cause. It is one of those aggregated buildings of all ages and styles which let us into the secrets of the art, and contain a whole history within themselves; and as the dates of the successive building eras can be ascertained with very tolerable accuracy, it may be as well to describe it next in the series, to explain how and when the various changes took place.

As is well known, the original cathedral at Trèves was built by the pious Helena, mother of Constantine, and seems, like the contemporary church at Jerusalem, to have consisted of two distinct edifices, one rectangular, the other circular. The original circular building was pulled down in the 13th century, to make way for the present church of St. Mary, erected on its site, and most probably of the same dimensions. Of the other, or square building, enough still remains



460. Plan of Original Church at Trèves.[1] Scale 100 ft. to 1 in.



461. Plan of Mediæval Church at Trèves. (From Schmidt, 'Baudenkmale von Triers.') Scale 100 ft. to 1 in.

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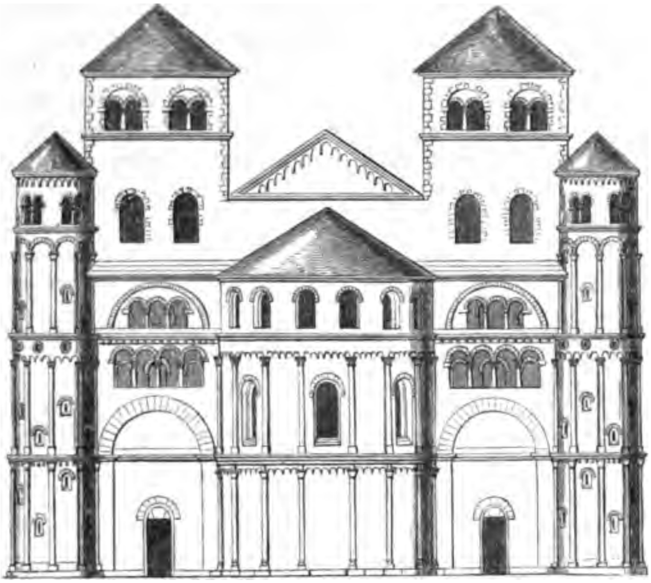
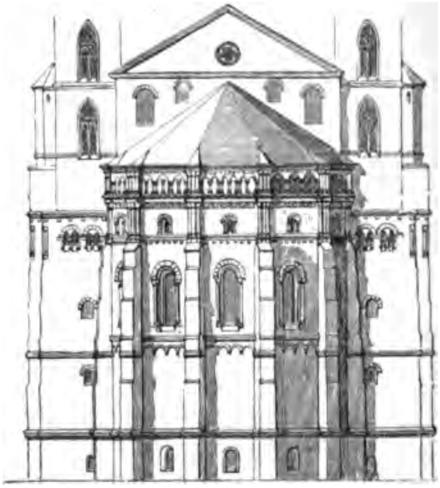
[1] It is by no means clear that there were not three or five pillars originally separating the nave from the aisles instead of the two now built into the piers of the Gothic church.

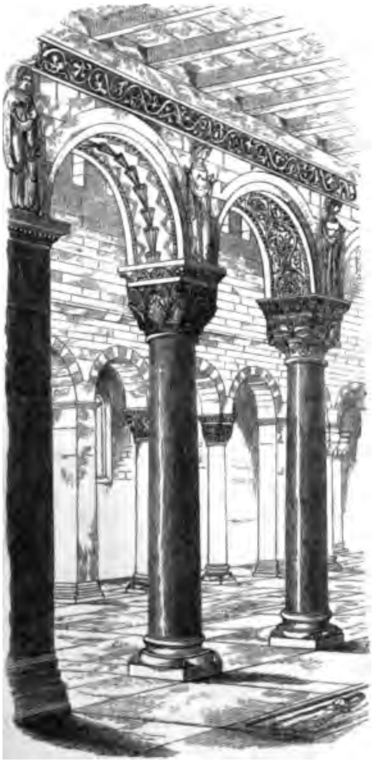
encased in the walls of the present basilica to enable us to determine its size and plan with very tolerable accuracy. The plan of it in the woodcut (No. 460) is taken from Schmidt's most valuable work on the Antiquities of Trèves. The atrium has been added by myself, because it was an almost universal feature in churches of the date in which this was erected, and because there is every reason to believe that the present church occupied as nearly as possible the exact site of the older one, and is of the same dimensions. The circular church is restored from the Roman examples of the same age (woodcuts 226, and 294 to 307). From their relative positions it will be seen how indispensable the atrium must have been.


462. Western Apse of Church at Trèves. (From Schmidt.) Scale 50 ft. to 1 in.

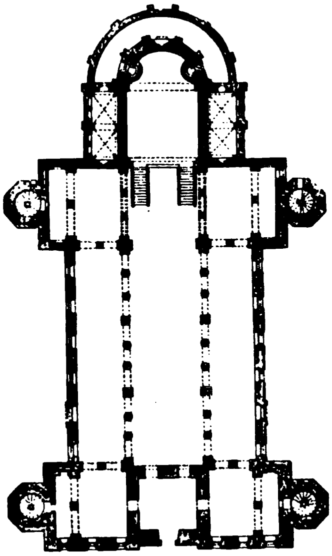

463. Eastern Apse of Church at Trèves. (From Schmidt.) Scale 50 ft. to 1 in.

This Romanesque church seems to have remained pretty much in its original state till the beginning of the 11th century, when the Archbishop Poppo found it so ruinous from age, that it required to be almost entirely rebuilt. He first encased the pillars of the Romans in masonry, making them into piers. He then took in and roofed over the atrium, and added an apse at the western end, thus converting it into a German church of the approved model, so that from this time forward the buildings took the form shown in the Woodcut No. 461. No very important works seem to have been undertaken from the beginning of the 11th till the middle of the 12th century, when Bishop Hillin is said to have undertaken the repair or rebuilding of the eastern apse: he did not proceed beyond the foundation; but the work was taken up and completed by Bishop John, who held the see from 1190 to 1212. These two apses, therefore, one an example of the beginning of the German round-arched style, the other representing the same near its close, show clearly the progress which had been made in the interval.

The first of these apses (Woodcut No. 462) is perhaps somewhat ruder than we might reasonably expect, though this may in part be accounted for by its remote provincial situation. The round towers too are subordinate to the square ones, in a manner more congenial to French than to German taste. But the principal defect is in the apsidal gallery, which is rude and tasteless as compared with other



464. Internal View of the Church at Hildesheim. (From Moller.)



465. Plan of Church at Hildesheim. (From Moller, continued by Gladbach.) Scale 100 ft. to 1 in.

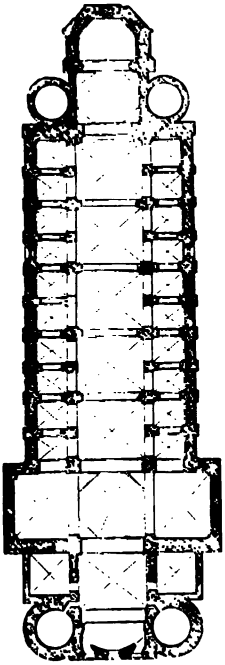
specimens, which we are apparently justified in considering as contemporary. Before the later or eastern apse was erected the gallery had almost run into the opposite extreme of minute littleness, and the polygonal form and projecting buttresses of pointed architecture were beginning to supersede the simpler outlines of the parent style, of which these two specimens form as it were the Alpha and the Omega. Between them the examples and varieties are so numerous, that there really is an *embarras de richesse* in selecting those most appropriate for illustration.

The church at Hildesheim, erected by Bishop Bernward in the first years of the 11th century, is among the earliest and most interesting of those remaining in sufficient purity to enable us to judge correctly of their original appearance. The plan (Woodcut No. 465) is simple,—first a western transept or façade, a nave little longer than it is broad, terminated by another transept similar to the first, flanked like it by two octagonal towers; beyond this a short choir and simple apse, with a low aisle surrounding it, but not communicating directly with the church. The entrances are as usual on each side of the nave, and none at the west end. Though the proportions appear short with reference to the breadth, considerable additional effect is given by the screens that shut off both arms of the eastern transept so as not to allow the perspective effect to be broken. Hence the continuous view of the central aisle, being six times as long as it is broad, gives the appearance of far greater length to the church than could be supposed possible from its lineal dimensions. But the great beauty here is the elegance both in proportion and detail of the pier-arches, which separate the nave from the aisles; the proportion of the pillars is excellent, their capitals rich and beautiful, and every third pillar being replaced by a pier gives a variety and apparent stability which is extremely pleasing.

The church at Limburg on the Haart, erected by the Emperor Conrad, A.D. 1035, is a similar though rather a larger church than that at Hildesheim, and possesses a peculiarity somewhat new in Germany, of a handsome western porch and entrance, with a choir with a square termination, instead of with an apse as was usual.

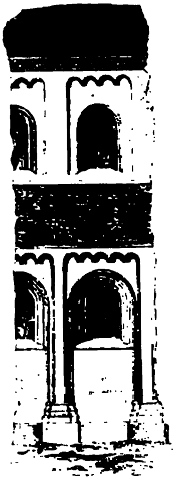
The three great typical buildings of this epoch are the Rhenish cathedrals of Mayence, Worms, and Spires. The first was commenced in the 10th century, and still possesses parts belonging to that age. The present edifice at Worms belongs principally to the church dedicated there in 1110. The age of the third and most important of these three cathedrals is still a matter of controversy, and one, I fear, that will not be settled without difficulty; for the church has been so frequently damaged by fire and war, and lately by ill-judged restorations, that it is not easy to ascertain what portions of it are old and what new. Still I cannot help feeling convinced that the plan, and probably a great part at least of the present structure, may belong to the original building of Conrad, commenced in 1030, and which was dedicated by his grandson Henry IV., thirty-one years afterwards.

Except the eastern apse, which is as usual flanked by two round towers, the whole of the exterior of Mayence has been so completely rebuilt, that little can now be said about it. The plan presents nothing remarkable, except that it is evident, from its solidity and arrangement, that it was intended from the commencement to be a vaulted building; while of its details only one doorway remains which can with certainty be said to belong to the original foundation.[1] It is remarkable principally for the classicality of its details, which almost deserve the title of Romanesque: and if its age is correctly ascertained (the end of the 10th century), it would go far to confirm the date usually assigned to the portal at Lorsch, namely, the late Carlovingian period.[2]



466. Plan of Cathedral of Worms. (From Geier and Görz.) Scale 100 ft. to 1 in.

At Worms, the only part now remaining of the edifice dedicated in 1110 is the eastern end. The western apse cannot be older than the year 1200, the intermediate parts having been erected between those dates. The original plan is probably nearly unchanged, and is a fine specimen of its class. The eastern apse is a curious compromise between the two modes of finishing that were in use at that period, being square externally, and circular in the interior. Internally the vaulting throughout is simple and judicious, without any straining after effects like those which puzzled the Norman architects in the same age (see *ante*, p. 516), and the alternate clustered piers and large size of the windows give to the whole a variety and lightness not usual in churches of that date. Nothing can well be simpler or nobler than the design externally. The four circular



467. One Bay of Cathedral at Worms. (From Geier and Görz.)

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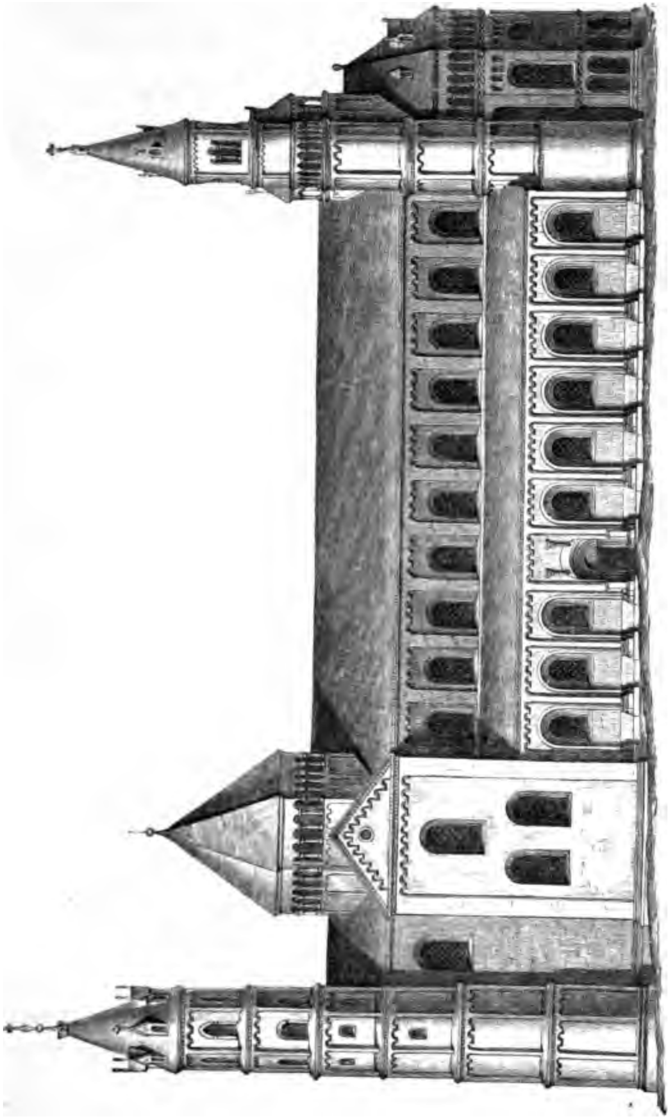
[1] Möller, 'Deutsch Baukunst,' vol. i. plate vi.

[2] I have not been able to ascertain the dimensions of Mayence Cathedral with sufficient correctness to quote them. I possess four plans, all with great pretensions to accuracy, and with scales attached, but they differ so widely that I do not know which to follow.

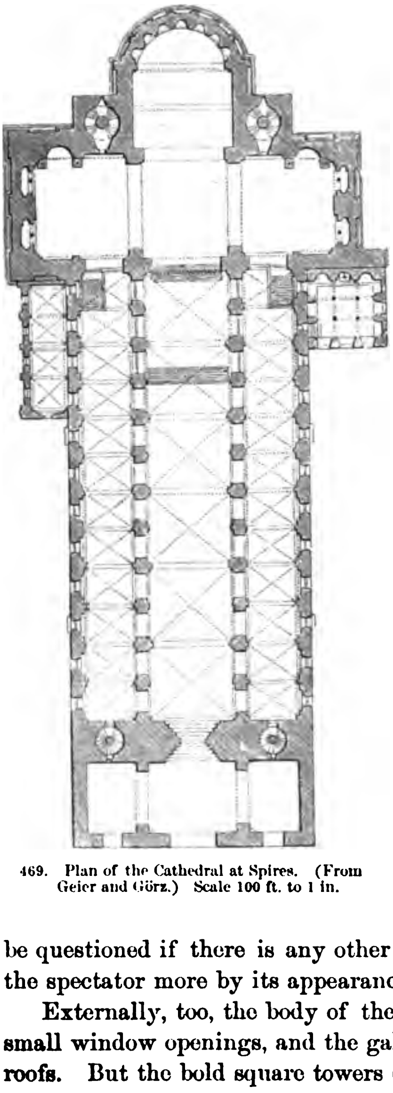
towers and the two domes break the sky-line pleasingly, and the ornamentation throughout is good and appropriate. Among the best of its details are the pilaster-like buttresses which ornament its flanks; one of these is shown on a larger scale (Woodcut No. 467). They display the true feeling of Gothic art: one moulding on each side running round the windows, while the central group forms a pilaster running up to the cornice.



468. Side Elevation of Worms Cathedral. (From Rosengarten.)

If the design has a defect, it is the want of dignity in the lateral entrances, and from these moreover being placed unsymmetrically on the flanks. The fact of these being lateral arose from the double-apse arrangement; but there seems no reason why they should not have been central, and been covered by a porch to give them dignity. Whether right or wrong, this position of the entrances is typical of German church architecture, and is found in all ages.

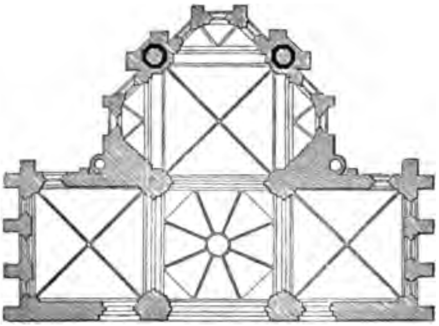
Although the cathedral of Spires cannot boast of the elegance and finish of that of Worms, it is perhaps, taken as a whole, the finest specimen in Europe of a bold and simple building conceived, if the expression may be used, in a truly Doric spirit. Its general dimensions are 435 ft. in length by 125 in width; and taken with its adjuncts, it covers about 57,000 square feet, so that though of sufficient dimensions, it is by no means one of the largest cathedrals of its class. It is built so solidly, that the supporting masses occupy nearly a fifth of the area, and like the other great building of Conrad's, the church of Limburg, this possesses, what is so rare in Germany, a narthex or porch, and its principal entrance faces the altar. Its great merit is the daring boldness and simplicity of its nave, which is 45 ft. wide between the piers, and 105 ft. high to the centre of the vault, dimensions never attained in England, though they are equalled or surpassed in some of the French cathedrals. There is a simple grandeur about the parts of this building which gives a value to the dimensions unknown in later times, and it may be questioned if there is any other Mediæval church which impresses the spectator more by its appearance of size than this.



469. Plan of the Cathedral at Spires. (From Geier and Görz.) Scale 100 ft. to 1 in.

Externally, too, the body of the church has no ornament but its small window openings, and the gallery that runs round under all its roofs. But the bold square towers (certainly of the 12th century) and the central dome group pleasingly together, and, rising so far above the low roofs of the half-depopulated town at its feet, impress the spectator with awe and admiration at the boldness of the design and the grandeur with which it has been carried out. Taken altogether, this noble building proves that the German architects at that time had actually produced a great and original style, and that had they persevered they must have succeeded in perfecting it, but they abandoned their task before it was half completed.

The western apse of the cathedral at Mayence is the most modern part of these three great cathedrals, and perhaps the only example in Germany where a triapsal arrangement has been attempted with polygonal instead of circular forms. In this instance, as shown in Woodcut No. 470, the three apses, each forming three sides of an octagon, are combined together so as to form a singularly spacious and elegant choir, both externally and internally as beautiful as anything of its kind in Germany. Its style is so nearly identical with that of the eastern apse of the cathedral at Trèves (Woodcut No. 463), that there can be no doubt but that, like it, it belongs to the beginning of the 13th century. At this time more variety and angularity were coming into use, suggested no doubt by the greater convenience which flat surfaces presented for inserting larger windows than could conveniently be used with the older curved outlines; for now that painted glass had come into general use, large openings had become indispensable for its display. Notwithstanding this advantage, and the great beauty of the other forms often adopted, none of them compensate for the external effect of the circular lines of the older buildings.

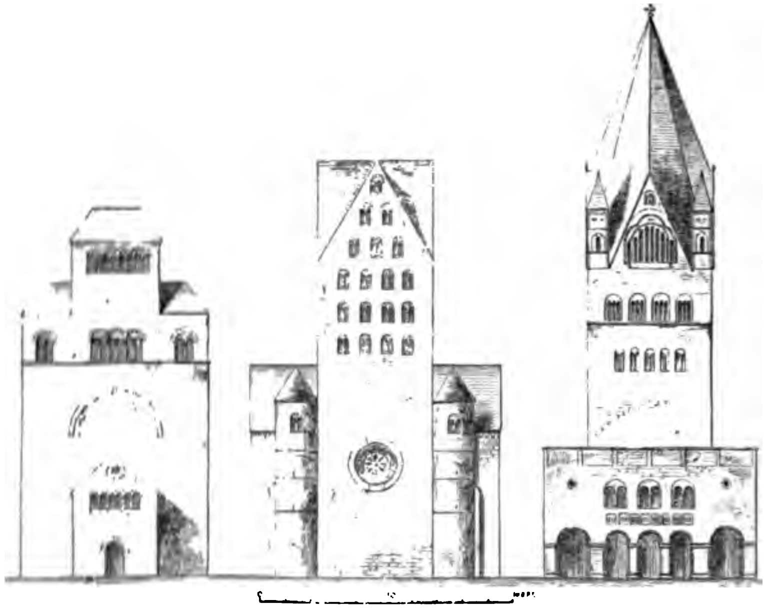


470. Western Apse of Cathedral at Mayence.

Proceeding northwards, it may be asserted as a general rule, that the churches of Westphalia are singularly devoid of taste and good design. They are extremely numerous, and many of them are sufficiently large for architectural effect; but in the earlier or round Gothic period they betray a clumsiness which is the reverse of pleasing, and in the age of the pointed Gothic the style is wire-drawn and attenuated to a degree which is almost worse than the heaviness of that which preceded it. The fact, indeed, is only too apparent that the northern Germans were not architecturally an artistic people, for neither in Westphalia nor in any of the countries between it and the

Baltic do we find any churches displaying that beauty of style or constructive appropriateness which characterises those of Cologne or the cities to the southward of that town.[1]

A good deal of the heaviness of the northern churches internally may no doubt be traced to the circumstance that the earlier examples depended almost wholly on colour for their ornament, and the painting having disappeared, the plain stone or plaster surfaces remain—their flatness being made only the more prominent by the whitewash that now covers them. Notwithstanding these defects, so many of these churches remain in a state so nearly unaltered at the present day, that much information might be gleaned from a study of their peculiarities. The three examples, for instance, given in Woodcut No. 471, illustrate very completely the progress of German spire-growth. The first, that of Minden, is a very early example of the façade screen so popular throughout Germany in the Middle Ages. The centre example, from the cathedral at Paderborn, belonging to the middle of the 11th century, shows one of the earliest attempts at a spire-like roof to a tower, four gables being used instead of the two which were generally employed. The third illustration, from Soest, about A.D. 1200, shows the transition complete. The four gables are



Church at Minden. Cathedral at Paderborn. Church at Soest.

471 From 'Mittelalterliche Kunst in Westphalen,' von W. Lübke.

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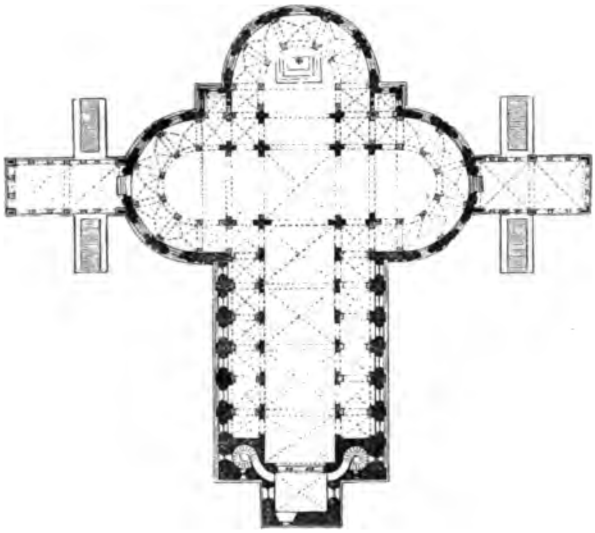
[1] The inhabitants of the artistic countries remain Catholics to the present day: the Aryans who could not build have, as everywhere else, turned Protestants.

still there, but do not extend to the angles, nor do they form the principal roof. The corners are cut off, so as to suggest an octagon, and a second roof has grown up to the form of a spire, entirely eclipsing that suggested by the gables. In this instance also the tower has become a specimen of a complete design, and, though the narthex or porch has somewhat the appearance of being stuck on, the upper part of the tower is of considerable elegance.

The same process of spire-growth can be traced to some extent both in England and in France, but on the whole it is by no means clear that the spire, properly so called, is not an importation from the banks of the Rhine. Height in the roof appears always to have been considered a beauty by German architects, and it seems to have been applied to towers earlier in Germany than in other countries.

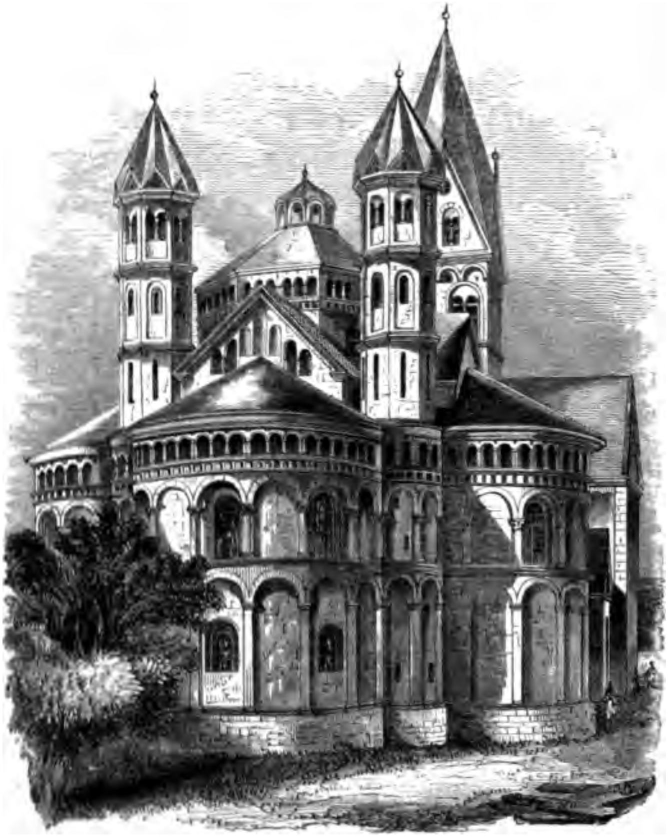


472. Sta. Maria in Capitolio, Cologne. (From Boisserée's 'Nieder Rhein.') Scale 100 ft. to 1 in.

Far more important than these, and surpassing them infinitely in beauty, is the group of churches which adorns the city of Cologne, the virtual capital, or at least the principal city, of Germany at the time of their erection. The old cathedral has perished and made way for the celebrated structure that now occupies its place. As just remarked, if it was like the restoration proposed by Boisserée, it resembled Worms, and must have belonged to the 12th century; but it does not seem that there are sufficient data for determining this question.

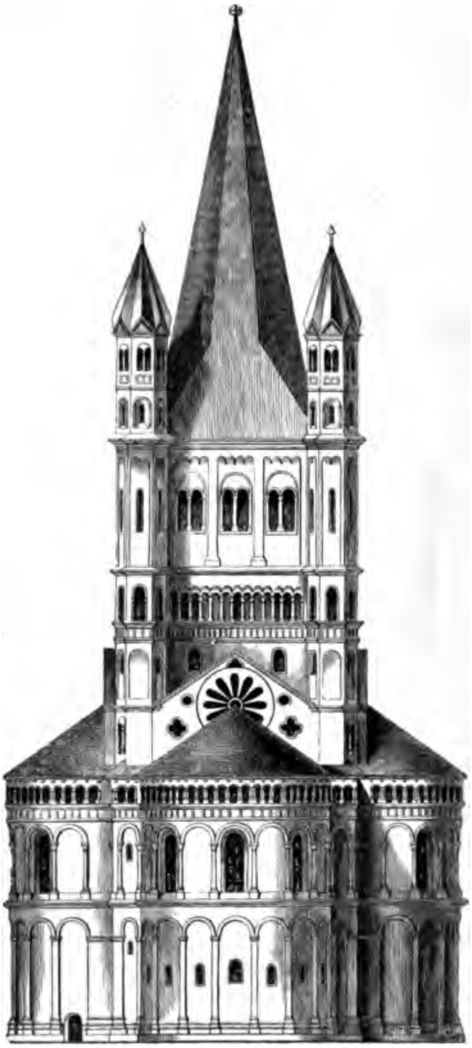
Of the remaining churches three may be selected as types of the German round-arched style as it existed on the eve of the introduction of the French pointed style into Germany.

Of these, Sta. Maria in Capitolio (Woodcut No. 472), is apparently the oldest. It was originally erected by Plectrudis, wife of Pepin Heristall, in the year 700, but of that church nothing now remains. The nave was rebuilt apparently in the 11th century, and the choir, with its three noble apses, in the 12th, and perhaps even as late as the 13th century. In plan these apses are more spacious than those of the Apostles' Church or of that of St. Martin (Woodcuts 473 and 474), this church alone having a broad aisle running round each, a feature which gives great breadth and variety to the perspective, but the apse of the Church of the Apostles (erected A.D. 1035) is far more beautiful externally. This latter building is perhaps, taken altogether, the most pleasing example of its class, externally at least. The whole design of the east end is quite complete, as we now see it, and is perfectly well balanced in all its parts. St. Martin's, on the other hand, (Woodcut No. 474) has more of the aspiring tendencies of the pointed yle, and, though very elegant, its apsidal gallery is too small, and



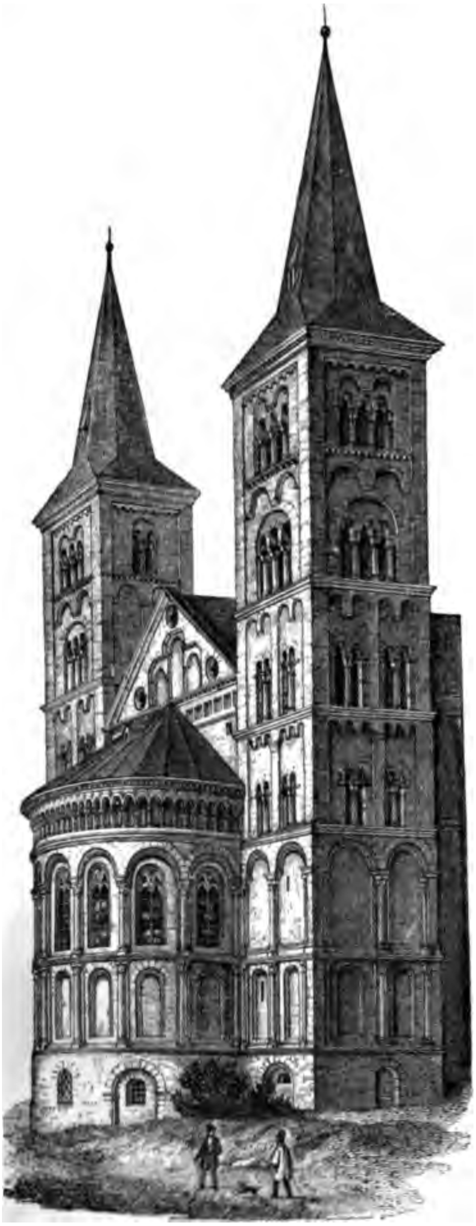
473 Apse of the Apostles' Church at Cologne. (From Boisseree.)

the whole design somewhat wire-drawn, while there is a solidity and repose about the design of the Apostles' Church, and a perfect harmony among the parts, which we miss in the more modern example.



474. Apse of St. Martin's Church at Cologne. (From Boisserée.) Scale 50 ft. to 1 in.

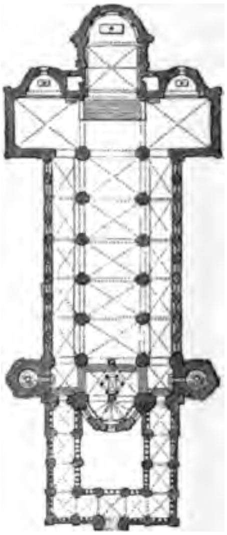
These three churches, taken together, suffice probably to illustrate sufficiently the nature and capabilities of the style which we are describing. The triapsal arrangement possesses in a remarkable degree the architectural propriety of terminating nobly the interior to which it is applied. As the worshipper advances up the nave, the three apses open gradually upon him, and form a noble and appropriate climax without the effect being destroyed by something less magnificent beyond. But their most pleasing effect is external, where the three simple circular lines combine gracefully together, and form an elegant basement for any central dome or tower. Compared with the confused buttresses and pinnacles of the apses of the French pointed churches, it must certainly be admitted that the German designs are far nobler, as possessing more architectural propriety and more of the elements of true and simple beauty. The churches which possess this feature are small, it is true, and therefore it is hardly fair to compare them with such imposing edifices as the great and overpoweringly magnificent cathedral of the same town; but among buildings on their own scale they are as yet unrivalled. As these churches now stand, their effect is to some extent marred by the circumstance of their naves neither being sufficient in extent nor so ornamental as to support effectually the varied outline and rich decoration of the apse. Generally these are of a different age and of a less ornate style, so that the complete effect of a well-balanced composition is wanting; but this does not suffice to destroy the great beauties these churches undoubtedly possess.



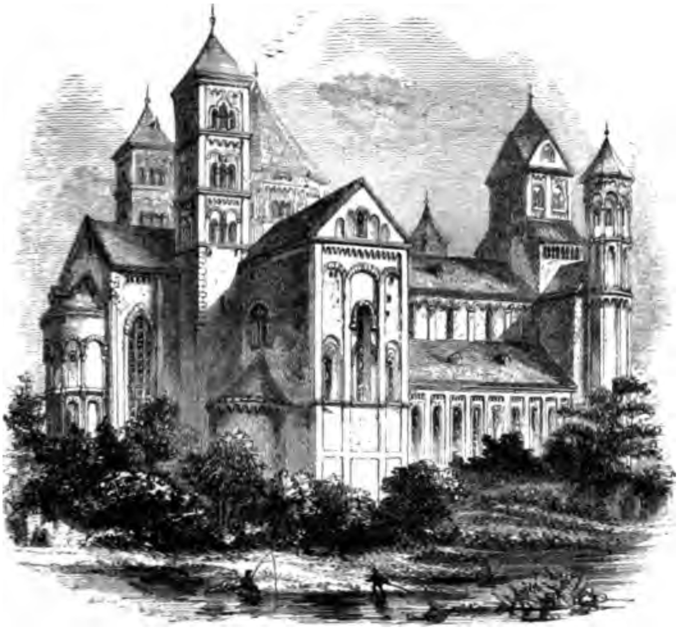
76. East End of Church at Bonn. (From Rosengarten.)

In so far as beauty of design in this style is concerned, perhaps the church at Bonn ought to be quoted next after those of Cologne. It is only the east end, however, that belongs properly to their style of architecture, the nave and central tower were not completed till the 13th century; but the eastern apse and its two flanking towers are in themselves as noble as the triapsal arrangement of the Apostles' Church, but would require even a bolder nave and loftier west end to balance them than the more modest arrangement of that building. As it is, the effect of the church as a whole is destroyed by the comparative meanness of these parts.

As is the case with almost all Mediæval buildings, the greater number of churches of this age have been erected at different periods of time, and the designs altered as the work proceeded, to suit the taste of the day. This circumstance makes them particularly interesting to the architectural historian, though the artist and architect must always regret the incompleteness and want of harmony which this produces. An exception to this rule is found in the beautiful abbey church at Laach, erected between the years 1093 and 1156, therefore rather early in the style. Its dimensions are small, only 215 ft. internally by 62; but this is compensated for by its completeness. It is one of the few churches that still possess the western paradisus or parvis, as shown in the remarkable ancient plan found at St. Gall.[1] The western apse is applied to its proper use of a tomb-house, and on each side of it, as at Reichenau, are the principal entrances. Externally this church has two central and four lateral towers, two of the latter being square, and two circular. It is impossible to fancy anything more picturesquely pleasing than this group of towers of various heights and shapes, or a church producing a more striking



476. Plan of Church at Laach. (From Geier and Görz.) Scale 100 ft. to 1 in.



477. View of Church at Laach. (From Geier and Görz.)

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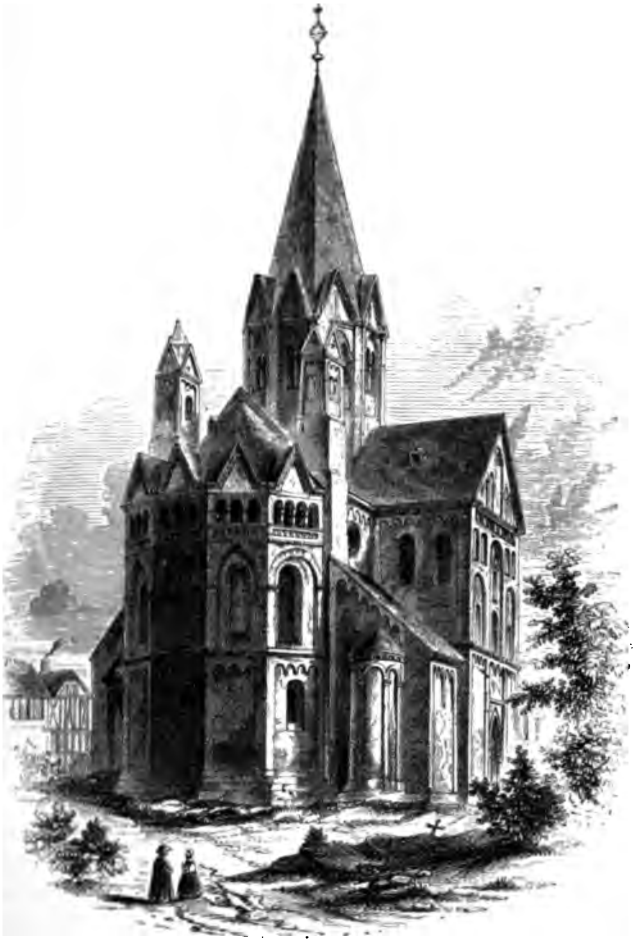
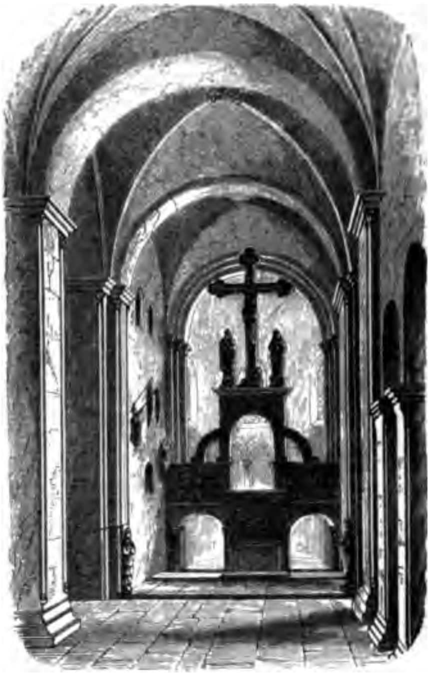
[1] See p 5 *et seqq.*

effect with such diminutive dimensions as this one possesses, the highest point being only 140 ft. from the ground-line. No church, however, of the pointed Gothic style has its sky-line so pleasingly broken, while the cornices and eaves still retain all the unbroken simplicity of classic examples, showing how easily the two forms might have been combined by following the path here indicated.

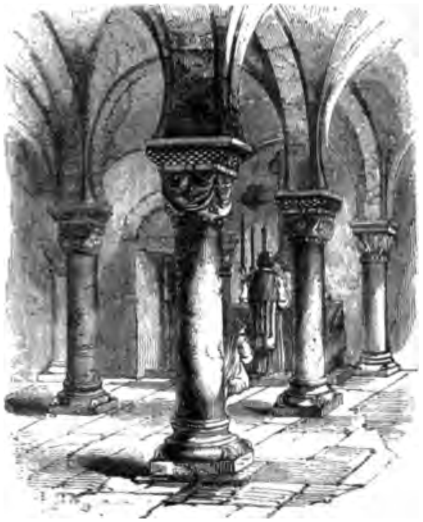


478. Church at Sinzig. (From Boisserée.)

These are perhaps the finest and most typical buildings in this style, and sufficient to characterise the form of architecture in vogue in Germany in the great Hohenstaufen period, and in the century immediately preceding the accession to power of that house; but they are not nearly all the really important buildings which during the epoch of true German greatness were erected in almost every consider-



479. Rood-Screen at Wechselburg. (From Puttrich.)



480. Crypt at Gollingen. (From Puttrich.)

able city of the empire. In Cologne itself there is the church of St. Gereon, the nave of which, with its crypt, belongs to the 11th century, the apse to the 12th, and the decagonal domed part to the 13th. This is a most interesting specimen of transition architecture, and as such will be mentioned hereafter. So is the church of St. Cunibert, dedicated in 1248, and hardly more advanced in style than the abbey of St. Denis near Paris, built at least a century earlier. The churches of St. George and of Sion in the same city afford interesting examples of the style; but even more important, however, than these are the noble church at Andernach, the abbey church of Heisterbach, and that of St. Guerin in Neuss. In the same neighbourhood the little church of Sinzig is a pleasing specimen of the age when the Germans had laid aside the bold simplicity of their earlier forms to adopt the more elegant and sparkling contours of pointed architecture.[1] A little farther up the Rhine the church of St. Castor at Coblentz agreeably exemplifies the later style (1157-1208), its apse being one of the widest and boldest of its class, though deficient in height.

The neighbourhood of Trèves has also some excellent specimens of round

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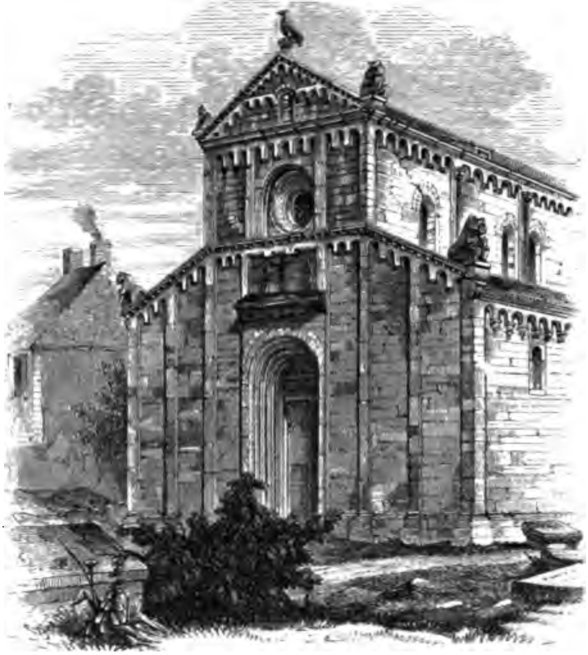
[1] For more particulars of these churches, see Boisserée, 'Nieder Rhein.'

Gothic, among which may be mentioned the abbey of Echternach, the church of St. Mathias, and the interesting and elegant church of Morzig.[1]

In Saxony there are many beautiful though no very extensive examples of the German style. Among these the two ruined abbeys of Paulinzelle and Thal Burgal, neither of them vaulted churches, are remarkable for the simple elegance of their forms and details, showing how graceful the style was becoming before the pointed arch was introduced. The church at Wechselburg is also interesting, though somewhat gloomy, and retains a rood-screen of the 12th century (Woodcut No. 479), which is a rare and pleasing example of its class. The church at Hechlingen also deserves mention, and the fragment of the abbey at Gollingen is a pleasing instance of the pure Italian class of design sometimes found in Germany at this age. Its crypt, too, (Woodcut No. 480) affords an example of vaulting of great elegance and lightness, obtained by introducing the horse-shoe arch, or an arch more than half a circle in extent, which takes off the appearance of great pressure upon the capital of the pillar, and gives the vault that height and lightness which were afterwards sought for and obtained by the introduction of the pointed arch. It is still a question whether this was not the more pleasing expedient of the two. There was one



481. Façade of the Church at Rosheim. (From Chapuy.)

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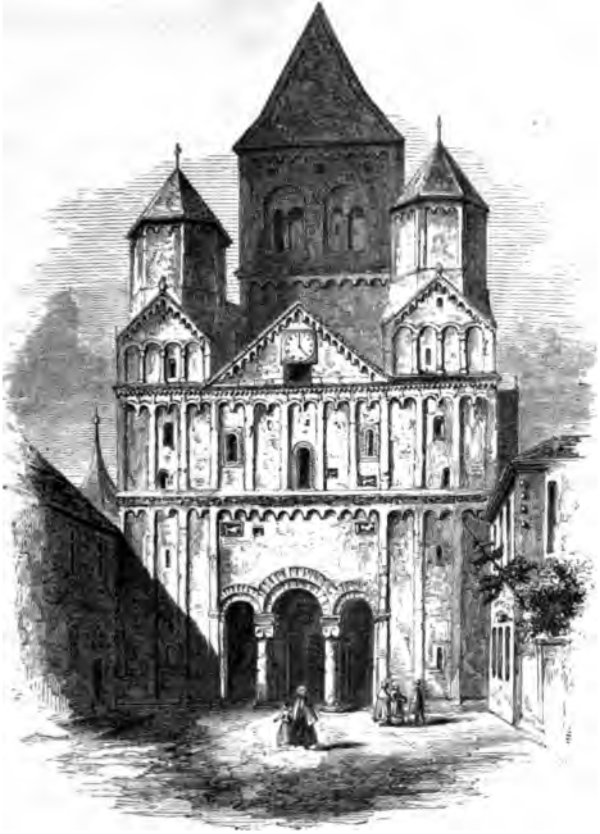
[1] See Schmidt, 'Baudenkmale Trier,' where all these are figured.

objection to the use of this horse-shoe shape, that considerable difficulty arose in using arches of different spans in the same roof, which with pointed arches became perfectly easy.

Another example of more Italian design, however, is found in the church of Rosheim in Alsace, the façade of which (Woodcut No. 481) belongs as much to Verona as to this side of the Alps. Its interior is of pleasing design, though bolder and more massive than the exterior would lead us to expect.

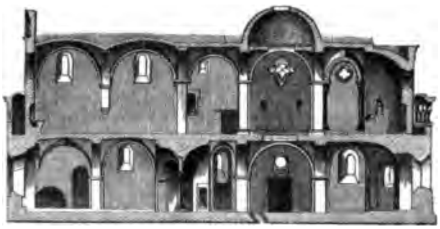


482. Church at Marmoutier. (From Chapuy.)

The façade of the church of Marmoutier in the same province, and of the cathedral of Guebwiller, are two examples—very similar to one another—of a compromise between the purely German and purely Italian styles of design. The small openings in the former look almost like those of a southern clime, but in its present locality give to the church an appearance of gloom by no means usual. Still it has the merit of vigorous and purpose-like character.

At Bamberg the church of St. Jacob is well worthy of attention, and the Scotch church at Ratisbon is one of the best specimens in Germany of a simple basilica without transepts or towers. Its principle entrance is a bold and elegant piece of design, covered with grotesque figures whose meaning it is difficult to understand. Had it been placed at the end of the church, it might have formed the basis of a magnificent façade; but stuck unsymmetrically on one side—as is so usual in Germany—it loses half its effect, and can only be considered as a detached piece of ornamentation, which is here—as it generally is—fatal to its effect as an architectural composition.

DOUBLE CHURCHES.



483. Section of Church of Schwartz Rheindorf. Scale 50 ft. to 1 in.

Before leaving ecclesiastical buildings, it is necessary to allude to a class of double churches and double chapels. Of these the typical example is the church of Schwartz Rheindorf,[1] dedicated in the year 1151. It is in itself a pleasing specimen of the style, irrespective of its peculiarity. It is, however, simply a church in two storeys. At first sight, the lower one looks like an extensive crypt, but this does not seem to have been its purpose so much as to afford an increase of accommodation, to enable two congregations to hear the same service at the same time, there being always in the centre of the floor of the upper church an opening sufficient for those above to hear the service, and for some of them at least to see the altar below. In castle chapels, where this method is most common, the upper storey seems to have been occupied by the noblesse, the lower by their retainers, which makes the arrangement intelligible enough.

The church at Schwartz Rheindorf is not large, being only 112 ft. long, over all, by 53 ft. wide across the transepts; and the two western bays appear to have been added afterwards. The walls of the lower storey are built of sufficient thickness to admit of a gallery being carried all round the church externally on the level of the floor of the upper church. This gives it a very peculiar but pleasing character; and as the details are good and appropriately designed, it is altogether as characteristic and as original a design as can well be found of the purely German style of its age.

In the castle at Nuremberg there is an old double chapel of this sort, but it does not appear in this instance that there was an opening between the two; if it existed, it has been stopped up. There is another at Eger, and two are described by Puttrich in his beautiful work on Saxony: one of these, the chapel at Landsberg near Halle, is given in plan and section in Woodcuts Nos. 485 and 486; and though small, being only 40 ft. by 28 internally, presents some beautiful combinations, and the details are finished with a degree of elegance not generally found in larger edifices; the other, that at Friburg on the Unstrutt, measuring 21 ft. by 28, is altogether the best of the class, from the beauty of its capitals and the finish of every part of it. It belongs in time to the very end of the 12th, or rather perhaps to the 13th century, and from the form of its vaults and the foliation of their principal ribs, one is almost inclined to ascribe to it a later

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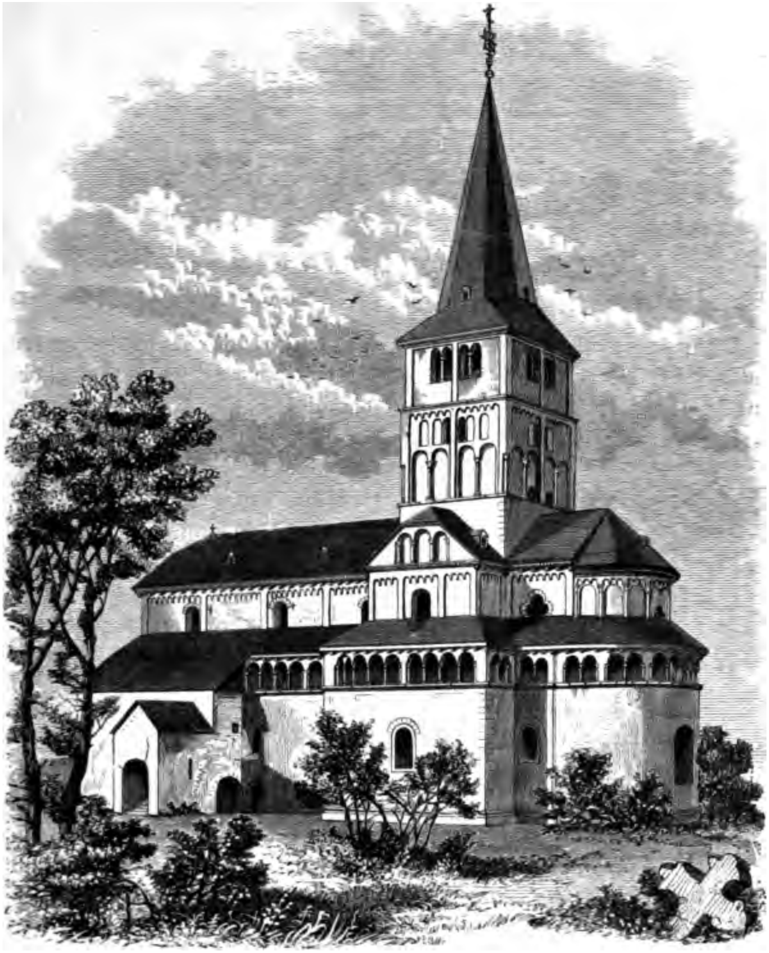
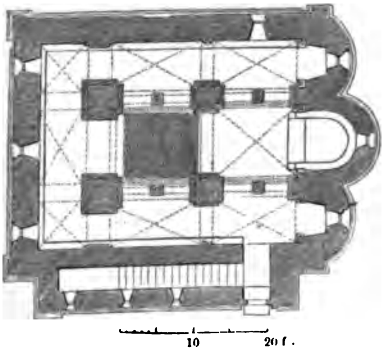
[1] 'Die Doppelkirche zu S.R.D.,' by Andreas Simons. Bonn, 1846.

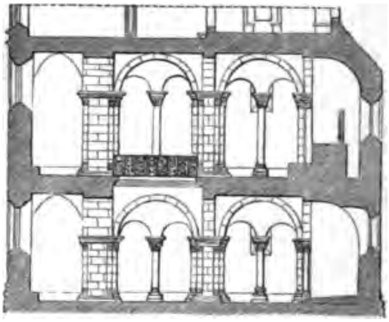


484. View of the Church of Schwartz Rheindorf. (From Simon.)

period; for it would be by no means wonderful if in a gem like this the lords of the castle should revert to their old German style instead of adopting foreign innovations. The windows are of pointed Gothic, and do not appear like insertions.

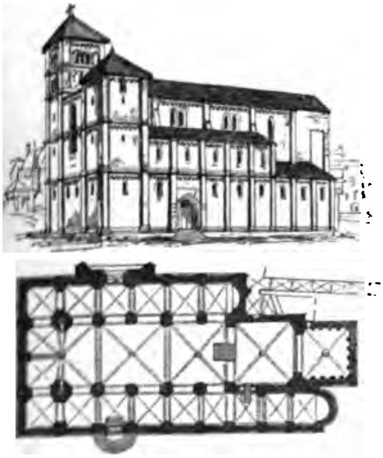


485. Plan of Chapel at Landsberg. (From Puttrich.)



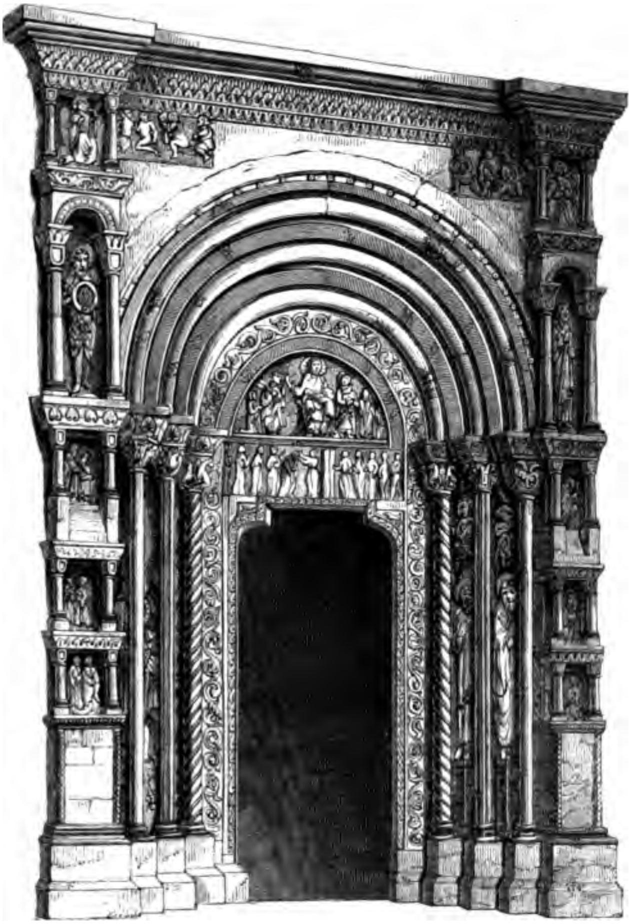
486. Section of Chapel at Landsberg. (From Puttrich.)

Returning again to Switzerland, with which this chapter began, we find several interesting buildings in that country during the whole round-arched Gothic period, many combining the boldness of the Northern examples with a certain amount of Southern elegance of feeling in the details, which together make a very charming combination. Among these, none are more remarkable than the cathedral at Zurich (Woodcut No. 487). Its date is not correctly known; for though it seems that a church was founded here in the time of Otho the Great, it is very uncertain whether any part of that building is incorporated in the present edifice, the bulk of which is evidently of the 11th or 12th century. The arrangement and details of the nave are so absolutely identical with those of San Michele at Pavia, that both must certainly belong to the same epoch. But in this church we meet with several German peculiarities to which attention cannot be too frequently drawn by those who would characterise correctly the peculiarities of German Gothic.



487. View and Plan of the Cathedral at Zurich. (From Vogelin.) Scale 100 ft. to 1 in.

The first of these is the absence of any entrance in the west front. Where there is an apse at either end, as is frequently the case in the German churches, the cause is perfectly intelligible; but the cathedral of Zurich has not, and never had, an apse at the west end, nor is it easy to suggest any motive for so unusual an arrangement, unless it is that the prevalence of the plan of two apses had rendered it more usual to enter churches in Germany at the side, and it was consequently adopted even where the true motive was wanting. In an architectural point of view, it certainly is a mistake, and destroys half the effect of the church, both internally and externally; but it was very common in Germany before they learnt from the French to make a more artistic arrangement of the several parts.



488. Doorway at Basle. (From Chapuy.)

Another peculiarity is the distinct preparation for two towers at the west end, as proved by the two great piers, evidently intended to support their inner angles. Frequently in Germany the whole west end was carried up to a considerable height above the roof of the nave, and either two or three small spires were placed on this frontal screen. This, however, does not appear to have been the case here; for though the two towers that now adorn it are modern, the intention seems originally to have been the same. Had they been intended to flank the portal, and give dignity to the principal entrance, their motive would have been clear; but where no portal was intended, it is curious that the Germans should so universally have used them, while the Italians, whose portals were almost as universally on their west fronts, should hardly ever have resorted to this arrangement.

The east end, as will be observed, is square, an arrangement not unusual in Switzerland, though nearly unknown in the Gothic churches of Italy and Germany. The lateral chapels have apses, especially the southern one, which I believe to be either the oldest part of the cathedral, or to have been built on the foundations of that of Otho the Great.

The most beautiful and interesting parts of this church are the northern doorway and the cloisters, both of nearly the same age, their date certainly extending some way at least into the 12th century. As specimens of the sculpture of their age, they are almost unrivalled, and strike even the traveller coming from Italy as superior to any of the contemporary sculpture of that country.

One of the doorways of the cathedral of Basle (Woodcut No. 488) is in the same style, and perhaps even more elegant than that of Zurich. Both in the elegance of its form and in the appropriateness of its details it is quite equal to anything to be found in Italy of the 11th or 12th century. Its one defect, as compared with Northern examples, is the want of richness in the archivolts that surmount the doorway. But, on the other hand, nothing can exceed the elegance of the shafts on either side, the niches of the buttresses, or of the cornice which surmounts the whole composition.

These details of the Swiss buildings are well worthy of the most attentive consideration, inasmuch as they equal those of Provence or the North of Italy in elegance of feeling and design, while they are free from the classical trammels which so frequently mar their appropriateness in those provinces. In Switzerland they are as original as in Northern Germany, and as picturesque, while they are free from the grotesqueness that so frequently mars the beauty of even the best examples in that country.

CHAPTER III.

CIRCULAR CHURCHES.

CONTENTS.

Aix-la-Chapelle — Nimeguen — Fulda — Bonn — Cobern.

If we are fortunate in having the St. Gall plan and Reichenau cathedral with which to begin our history of the basilican-formed churches in Germany, we are equally lucky in having in the Dom at Aix-la-Chapelle an authentic example of a circular church of the same age. As Emperor of the Romans, Charlemagne seems to have felt it necessary that he should have a tomb which should rival that of Augustus or Hadrian, while, as he was a Christian, it should follow the form of that of Constantine, or the most approved model of the circular church, which was that which had been elaborated not very long before at Ravenna. Though its design may have been influenced by Italian examples to some extent, the general arrangement of the building and its details exhibit an originality which is very remarkable. The mode in which the internal octagon is converted into a polygon of sixteen sides, the arrangement of the vaults in both storeys, and the whole design, are so essentially Gothic, so different from anything Romanesque in form, that it must be far from being the first example of its style. It is, however, the oldest we possess, as well as the most interesting. It was built by the greatest man of his age, and more emperors have been crowned and more important events have happened beneath its venerable vaults than have been witnessed within the walls of any existing church in Christendom. Notwithstanding the doubts that have been thrown lately on the fact, I feel convinced that we now possess the church of Charlemagne in all essential respects as he left it.[1] The great difficulty in fixing its age appears to arise from the circumstance that most of its architectural ornaments have been painted or executed in mosaic, instead of being carved, and time and whitewash have so obliterated these, that the remaining skeleton—it is little else—seems ruder and clumsier than might be expected.

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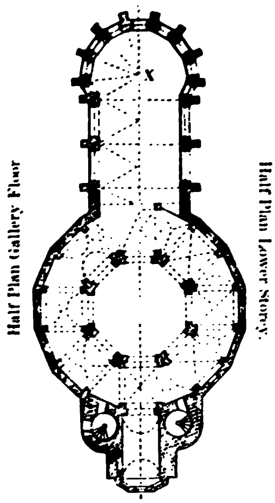
[1] The building is as yet practically unedited, notwithstanding its importance in the history of architecture. I have myself examined this edifice, but in too hurried a manner to enable me to supply the deficiency. I speak, therefore, on the subject with diffidence.

As will be seen from the annexed plan, the church is externally a polygon of sixteen sides, and is about 105 ft. in diameter; internally, eight compound piers support a dome 47 ft. 6 in. in diameter. The height is almost exactly equal to the external diameter of the building. Internally this height is divided into four storeys: the two lower, running over the side-aisles, are covered with bold intersecting vaults. The third gallery, like the triforium of more modern churches, is open to the roof, and above that are eight windows giving light to the central dome.



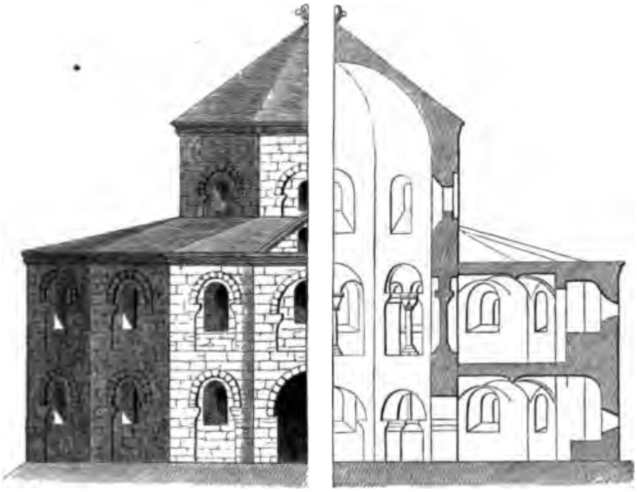
489. Plan of the Church at Aix-la-Chapelle. (From J. von Nolten.) Scale 100 ft. to 1 in.

To the west was a bold tower-like building, flanked, as is usual in this style, by two circular towers containing staircases. To the east was a semicircular niche containing the altar, which was removed in 1353, when the present choir was built to replace it.

There is a tradition that Otho III. rebuilt this minster, though it is more probable that he built for himself a tomb-house behind the altar of that of his illustrious predecessor, where his bones were laid, and where his tomb till lately stood at the spot marked X in the centre of the new choir. What the architect seems to have done in the 14th century was to throw the two buildings into one, retaining the outline of Otho's tomb-house, which may still be detected in the unusual form shown in the plan of the new building.

The tradition is that this building is a copy of the church of San Vitale at Ravenna, and on comparing its plan with that represented in Woodcut No. 301, it must be admitted that there is a considerable resemblance. But there is a bold originality in the German edifice, and a purpose in its design, that would lead us rather to consider it as one of a long series of similar buildings which there is every reason to believe existed in Germany in that age. At the same time the design of this one was no doubt considerably influenced by the knowledge of the Italian examples of its class which its builders had acquired at Rome and Ravenna. Its being designed by its founder for his tomb is quite sufficient to account for its circular plan - that, as has been frequently remarked, being the form always adopted for this purpose. It may be considered to have been also a baptistery—the coronation of kings in those days being regarded as a re-baptism on the entrance of the king upon a new sphere of life. It was in fact a ceremonial church, as distinct in its uses as in its form from the basilica, which in Italy usually accompanied the circular church; but whether it did so or not in this instance can only be ascertained when the spot and its annals are far more carefully examined than has hitherto been the case.

The church at Nimeguen is even less known than this one; we have no tradition as to who its builder was, nor whose tomb it was erected to contain. From the half-section, half-elevation (Woodcut No. 490[1]), it will be seen that it is extremely similar to the one just described, both in plan and elevation, but evidently of a somewhat more modern date, having scarcely a trace of the Romanesque style. It wants too the façade which usually adorned churches of that age; but it seems so unaltered from its original arrangement that it is well worthy of more attention than it has hitherto received.



490. Church at Nimeguen. (From Schayes.) No scale.

Of the church of Otho the Great at Magdeburg we know nothing but from a model in stone, about 12 ft. in diameter, still existing in the present cathedral, and containing sitting effigies of Otho and his English Edith, who were buried in the original edifice. The model unfortunately was made in the 13th century, when the original was burnt down; and as the artists in that day were singularly bad copyists, we cannot depend much on the resemblance. It appears, however, to have been a polygon of sixteen sides externally, like the two just mentioned; and if it is correct to assume, as was generally the case, that the choir of the present cathedral is built on the foundation of the older church, its dimensions must have been nearly similar, or only slightly inferior to those of either of the two last-mentioned churches. The details of the model belong to the age in which it was made, and not to that of the church it was meant to represent.

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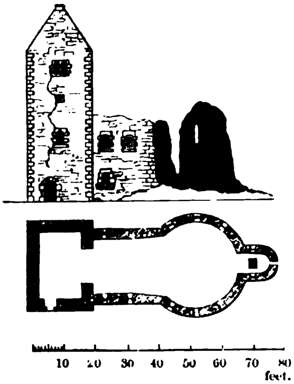
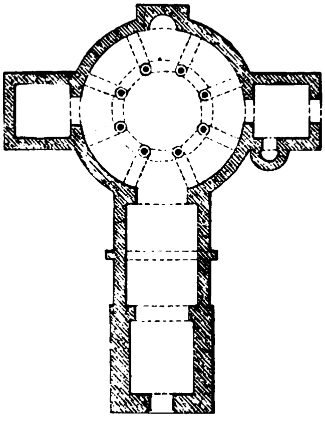
[1] Taken from Schayes' 'Histoire de l'Architecture en Belgique,' vol. ii. p. 18, taken by him, I believe, from Lassaultx.

At Ottmarsheim in Alsace is another example which, both in design and dimensions, is a direct copy of the church at Aix-la-Chapelle. The only difference in plan is that it remains an octagon externally as well as internally, and that the gallery arches, instead of being filled with a screen of classical pillars borrowed from Italy, are ornamented with shafts supporting eight arches designed for the place. There is no tradition which tells us who built this church, nor for what purpose it was erected. It is older than that at Nimeguen, but is certainly a copy of Charlemagne's church, and apparently not very much more modern.



491. Church at Petersberg. (From Puttrich.)

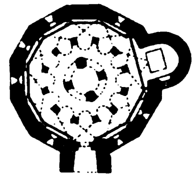
At the Petersberg, near Halle, is a curious compound example shown in the Woodcut No. 491. It is a ruin, but interesting as showing another form of circular church differing from those described above, more essentially German in design, and less influenced by classical and Romanesque forms than they were. It never was or could have been vaulted, and it possesses that singular flat tower-like frontispiece so characteristic of the German style, which is found in no other country, and whose origin is still to be traced.



492. Plan of Church at Fulda. (From Pettit.) Scale 50 ft. to 1 in.

At Fulda there is a circular church of a more complicated plan than this, though it is in fact only an extension of the same design. The circular part or choir is in this instance adorned with eight free-standing pillars of very classical proportions and design, very similar to those of Hildesheim (Woodcut No. 464). There is a small transeptal entrance on one side of the circle, and apparently a vestry to correspond on the other. It is altogether one of the most perfect buildings of its class, either in Germany or France, in so far at least as its plan is concerned. Its date is probably the beginning of the 11th century, but it stands on a circular crypt of still more ancient date.[1]

At Drügelte, near Soest, there is a small circular church which deserves notice for the singularity of its plan. Externally it is a polygon of twelve sides. Internally it has four pillars, in the centre two very large and strong, two more slender, and around them a circle of twelve pillars of very attenuated form. As is usual in German churches, the door and apse are not placed symmetrically as regards each other. Its dimensions are small, being only 33 ft. across internally. The German architects are not quite agreed as to its date; generally it is said that its founder brought the plan from the Holy Land, and built it here in the 12th century, meaning it to be an exact copy of the Holy Sepulchre. If this be the case, it is the plan of the Dome of the Rock that he brought away and repeated, for the arrangement has considerable similarity with the plan of that building, but none whatever with that of the church of the Holy Sepulchre.



493. Plan of Church at Drügelte. (From Kugler.) Scale 50 ft. to 1 in.

Though it is anticipating to some extent the order of the dates of the buildings of Germany, it may be as well to complete here the subject of the circular churches of that country; for after the beginning of the 11th century they ceased to be used except in rare and isolated instances. At that date all the barbarian tribes had been converted, and the baptism of infants was a far less important ceremony than the admission of adults into the bosom of the Church, and one not requiring a separate edifice for its celebration, and tombs had long since ceased to be objects of ambition among a purely Aryan race. At the same time the immense increase of the ecclesiastical orders, and the liturgical forms then established, rendered the circular form of church inconvenient and inapplicable to the wants of the age. The basilica, on the other hand, was equally sacred with the baptistery, and soon came to be considered equally applicable to the entombment of emperors and to other similar purposes.

The circular church called the Baptistery at Bonn (Woodcut No. 494), which was removed only a few years ago, was one of the most interesting specimens of this class of monuments in the age to which it belongs. No record of its erection has been preserved, but its style is evidently of the 11th century. Excepting that the straight or rectangular part is here used as a porch, instead of being inserted between the apse and the round church to form a choir, the building is almost identical with St. Tomaso in Limine, and other Lombard churches of the same age. Both externally and internally it is certainly a pleasing and elegant form of church, though little adapted either for the accommodation of a large congregation or to the ceremonies of the Mediæval Church.

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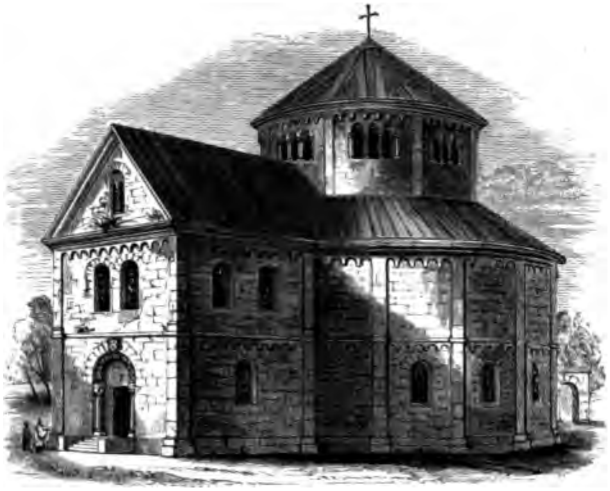
[1] See paper by Mr. Pettit in the 'Archæological Journal,' vol. xviii. p. 110.



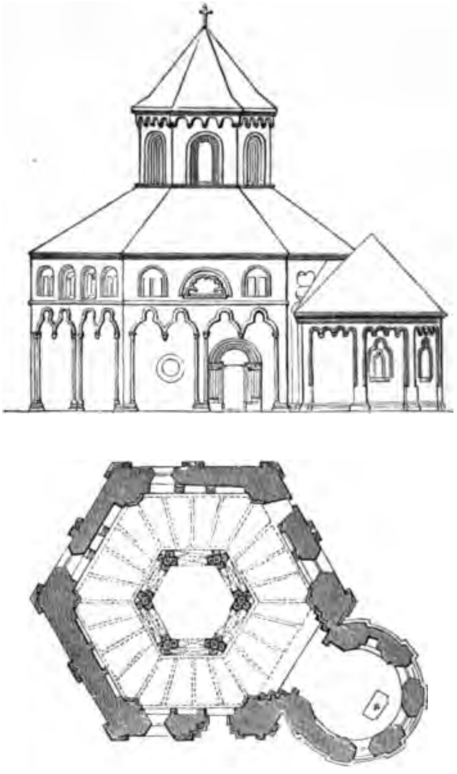
494. Baptistery at Bonn. (From Boisserée's 'Nieder Rhein.')

There is another small edifice called a Baptistery at Ratisbon, built in the last years of the 12th century, which shows this form passing rapidly away, and changing into the rectangular. It is in reality a square with apses on three sides, and surmounted by an octagonal dome. As we have just seen, the same arrangement forms the principal as well as the most pleasing characteristic of the Cologne churches, where on a larger scale it shows capabilities which we cannot but regret were never carried to their legitimate termination. The present is a singularly pleasing specimen of the class, though very small, and wanting the nave, the addition of which gives such value to the triapsal form at Cologne, and shows how gracefully its lines inevitably group together. On the spot it is still called the Baptistery; but the correct tradition, I believe, is that it was built for the tomb-house of the bishop to whom it owes its erection.

One more specimen will serve to illustrate nearly all the known forms of this class. It is a little chapel at Cobern on the Moselle (Woodcut No. 495), hexagonal in plan, with an apse, placed most unsymmetrically with reference to the entrance—so at least we should consider it; but the Germans seem always to have been of opinion that a side entrance was preferable to one opposite the principal point of interest. The details of this chapel are remarkably elegant, and its external form is a very favourable specimen of the German style just before it was superseded in the beginning of the 13th century by the French pointed style.

There is, besides these, a circular chapel of uncertain date at Altenfurt near Nuremberg, and there are many others at Prague and in various parts of Germany, but none remarkable either for their historical or for their artistic importance. This form went out of use before the style we are describing reached its acmé; and it had not therefore a fair chance of receiving that elaboration which was necessary for the development of its capabilities.

A little farther on we shall have occasion again to take up the subject of circular churches when speaking of those of Scandinavia, where the circular form prevailed to a great extent in the early ages of Christianity in that country; never, however, as a baptistery or a tomb-house, but always as a kirk—or cirque. It was afterwards introduced by the Danes into Norfolk and Suffolk, but there still farther modified, becoming only a western round tower, instead of a circular nave.



495. Chapel at Cobern on the Moselle. (From Wiebeking.) No scale.

CHAPTER IV.

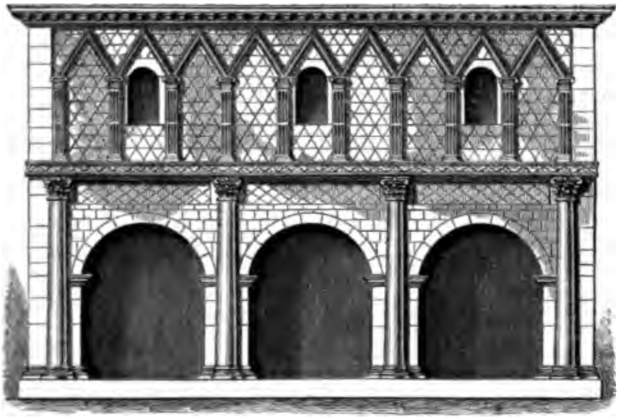
DOMESTIC ARCHITECTURE.

CONTENTS.

Lorsch — Palaces on the Wartburg — Gelnhausen — Houses — Windows.

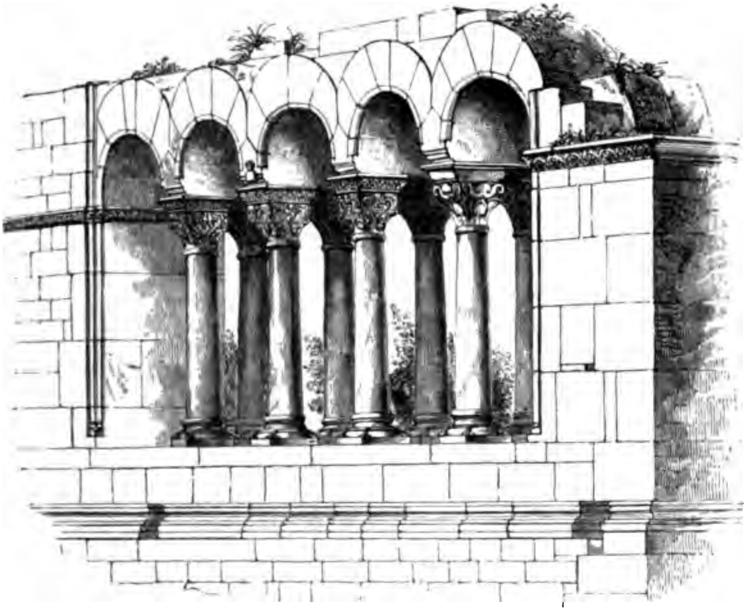
As might be expected, the remains of domestic architecture are few and insignificant as compared with those of the great monumental churches, which in that age were the buildings *par excellence* on which the wealth, the talent, and the energy of the nation were so profusely lavished.

The earliest building which has been brought to light is certainly the portal of the Convent at Lorsch, near Mannheim. It is now used as a store and has been a good deal defaced; but sufficient remains, not only to show its form, but the character of its details. These are so classical as to justify us in calling the building Romanesque; and if it were not that we have buildings—such, for instance, as St. Paul aux Trois Chateaux (Woodcut No. 317), which may date in the 10th and 11th century—we might be inclined to assert most confidently that the date of this building must approximate nearly to the time of the departure of the Romans. On the other hand, the purely classical details of such buildings as those found in Provence must render us



496. Porch of Convent at Lorsch. (From Moller's 'Denkmäler,' &c.) No scale.

cautious in judging of the age of any erection at that early time, from the style alone. No church in Germany is so classical in its details as this, but it will not do to rely on these alone for evidence of date; for a hundred churches may have been built for one portal like this, and though ecclesiastical forms had become sacred, an architect may have felt himself justified in resorting to any amount of Paganism in a semi-secular building. On the whole there seems little doubt but that this porch formed part of the monastic building dedicated in the presence of Charlemagne in 774. It may, however, have been erected by an Italian architect, and consequently be more classical in its details than if the product of some purely Teutonic artist.



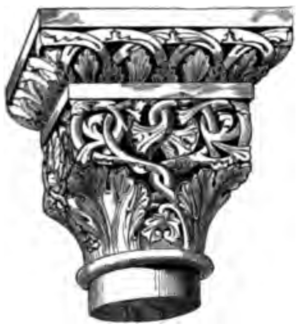
497. Arcade of the Palace at Gelnhausen. (From Moller.)

Its dimensions are inconsiderable, being only 31 ft. by 24. It has three arches in each face, and above them a series of pilasters supporting straight-lined arches—if the expression may be used. These are interesting, as the same form is currently used in our Saxon architecture, but never with such purely classical details as here. It is, in fact, only the elegance of these that gives interest to this building.

Nothing now remains of the palaces which Charlemagne built at Ingelheim or at Aix-la-Chapelle, nor of the residences of many of his successors, till we come to the period of the Hohenstaufens. Of their palaces at Gelnhausen and on the Wartburg enough remains to tell us at least in what style and with what degree of taste they were erected, and the remains of the contemporary castle of Muenzenberg complete, as far as we can ever now expect it to be completed, our knowledge of the subject.

Besides these a considerable number of ecclesiastical cloistered edifices still remain, and some important dwelling-houses in Cologne and elsewhere; but on the whole our knowledge is somewhat meagre, —a circumstance that is much to be lamented, as, from what we do find, we cannot fail to form a high idea of the state of the domestic building arts at that period.

What remains of the once splendid palace of Barbarossa at Gelnhausen consists first of a chapel very similar to those described in the last chapter; it is architecturally a double chapel, except that the lower storey was used as the hall of entrance to the palace, and not for divine service. To the left of this were the principal apartments of the palace, presenting a façade of about 112 ft. in length, and probably half as high. Along the front ran a corridor about 10 ft. deep, a precaution apparently necessary to keep out rain before glass came to be generally used. Behind this there seem to have been three rooms on each floor; the largest, or throne-room, being about 50 ft. square. The principal architectural features of what remains are the open arcades of the façade, one of which is represented in the last woodcut (No. 497). For elegance of proportion and beauty of detail they are unsurpassed by anything of the age, and certainly give a very high idea of the degree of excellence to which architecture and the decorative arts had then been carried, and, as will be observed, they are purely Gothic in detail, without any trace of the classicality of Lorsch.

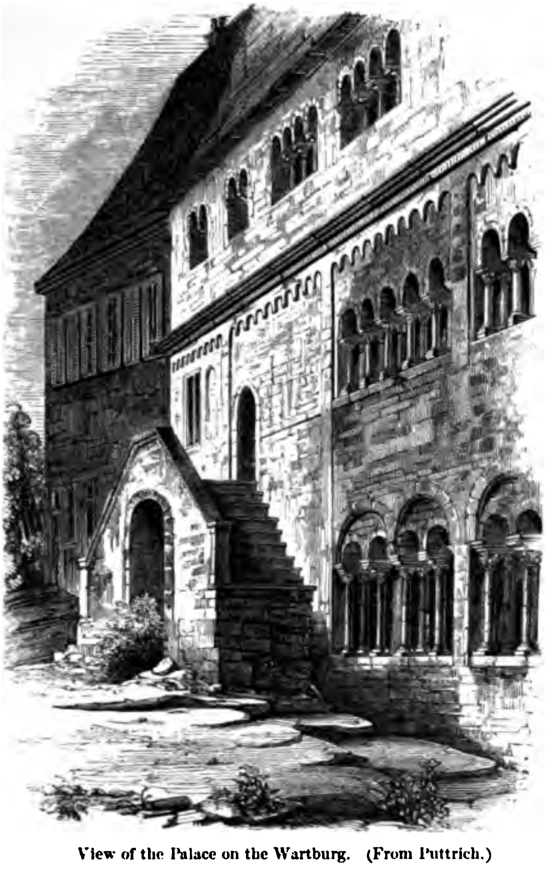


498. Capital, Gelnhausen. (From Moller, 'Denkmäler.')

The castle on the Wartburg is historically the most important edifice of its class in Germany, and its size and state of preservation render it remarkable in an artistic point of view. It was in one of its halls that the celebrated contest was held between the six most eminent poets of Germany in the year 1206, which, though it nearly ended fatally to one of them at least, shows how much importance was attached to the profession of literature at even that early period. Here the sainted Elizabeth of Hungary lived with her cruel brother-in-law; here she practised those virtues and endured those misfortunes that render her name so dear and so familiar to all the races of Germany; and it was in this castle that Luther found shelter after leaving the Diet at Worms, and where he resided under the name of Ritter George, till happier times enabled him to resume his labours abroad.

The principal building in the castle where these events took place closely resembles that at Gelnhausen, except that it is larger, being 130 ft. in length by 50 in width. It is three storeys in height, without counting the basement, which is added to the height at one end by the slope of the ground.

All along the front of every storey is an open corridor leading to the inner rooms, the dimensions of which cannot now be easily ascertained, owing to the castle having been always inhabited, and altered in modern times to suit the convenience and wants of its recent occupiers. In its details it has hardly the elegance of Gelnhausen, but its general appearance is solid and imposing, the whole effect being obtained by the grouping of the openings, in which respect it resembles the older palaces at Venice more than any other buildings of the class. It has not perhaps their minute elegance, but it far surpasses them in grandeur and in all the elements of true architectural magnificence. It has been recently restored, apparently with considerable judgment,



449. View of the Palace on the Wartburg. (From Puttrich.)

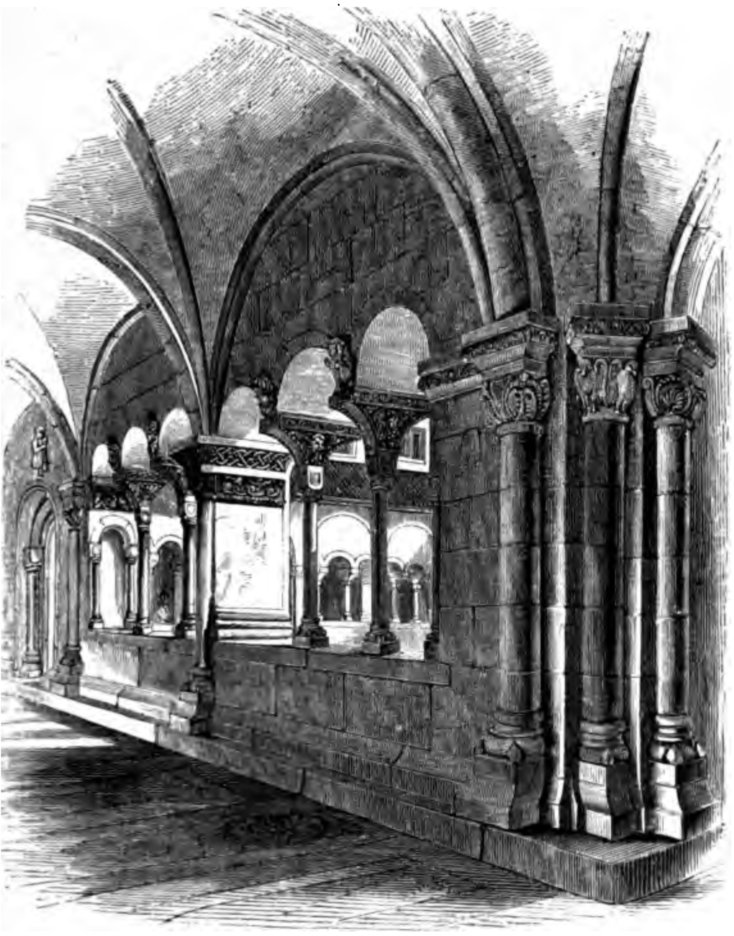
and it well deserves the pains bestowed upon it as one of the best illustrations of its style still existing in Europe.

The castle on the Muenzenberg, like those of Gelnhausen and Wartburg, belongs to the 13th century, and, though less important, is hardly less elegant than either. It derives a peculiar species of picturesqueness from being built principally of the prismatic basalt of the neighbourhood, the crystals being used in their natural form, and where these were not available, the stones have been rusticated with a boldness that gives great value to the more ornamental parts, in themselves objects of considerable beauty.

None of these castles have much pretension to interest or magnificence as fortifications,—a circumstance which gives an idea of more peaceful times and more settled security than we could quite expect in that age, especially as we find in the period of the pointed style so many and such splendid fortifications crowning every eminence along the banks of the Rhine, and indeed in every corner of the land. These last may, in some instances, have been rebuildings of castles of this date, but I am not aware of any having been ascertained to be so.

There is no want of specimens of conventual buildings and cloisters in Germany of this age; but every one is singularly deficient both in design as a whole and in the elegance of its parts. The beautiful arcades of the palaces we have just been describing nowhere reappear in conventual buildings. Why this should be so it is difficult to understand, but such certainly is the fact. The most elegant that is known to exist is probably the cloister to the cathedral at Zurich. It is nearly square, from 60 to 70 ft. each way. Every side is divided into five bays by piers supporting bold semicircular arches, and these are again subdivided into three smaller arches supported by two slender pillars. The arrangement will be understood from the woodcut (No. 500). This cloister is superior in design to many in France and elsewhere of the same age; its great beauty consists in the details of the capitals and string-courses, which are all different, most of them with figures singularly well executed, but many merely with conventional foliage, not unlike the honeysuckle of the Greeks, and not unworthy of the comparison as far as the mere design is concerned, though the execution is rude. The same is the case with the sculptures of the portal; for though they display even less classical feeling, they show an exuberance of fancy and a boldness of handling which we miss entirely in the succeeding ages, when the art yielded to make way for mere architectural mouldings, as if the two could not exist together. The example of Greece forbids us to believe that such is necessarily the case, but in the Middle Ages it certainly was, that as the one advanced nearer to perfection, the other declined in almost an equal degree.

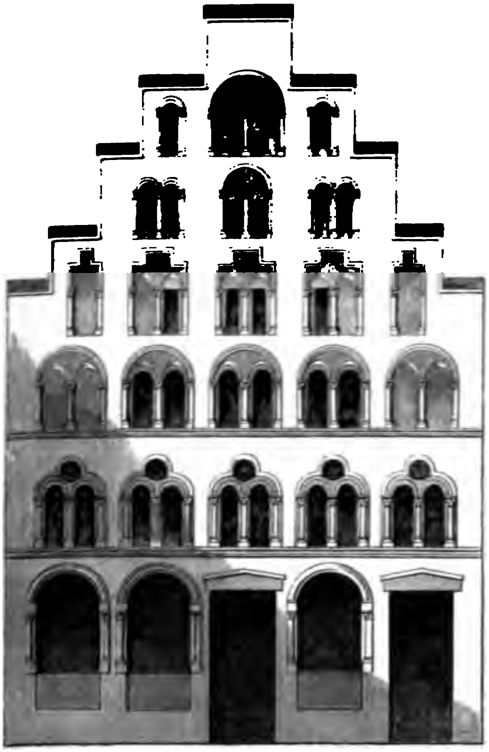
The best collection of examples of German convents is found in Boisserée's 'Nieder Rhein.' But neither those of St. Gereon nor of the Apostles, nor St. Pantaleone at Cologne, merit attention as works of art, though they are certainly curious as historical monuments; and the lateral galleries of Sta. Maria in the Capitol are even inferior in design; their resemblance, however, to the style of Ravenna gives them some value archæologically. The same remarks apply to the cloisters at Heisterbach, and even to the more elegant transitional buildings at Altenburg. Almost all these examples, nevertheless, possess some elegant capitals and some parts worthy of study; but they are badly put together and badly used, so that the pleasing effect of a cloistered court and conventual buildings is here almost entirely



500. Cloister at Zurich. (From Chapuy, 'Moyen-Age Monumental.')

lost. The cause of this is hard to explain, when we see so much beauty of design in the buildings to which they are generally accompaniments.

There are several dwelling-houses in Cologne and elsewhere which show how early German town-residences assumed the tall gabled fronts which they retained to a very late period through all the changes which took place in the details with which they were carried out. In the illustration (Woodcut No. 501) there is little ornament, but the forms of the windows and the general disposition of the parts are pleasing, and the general effect produced certainly satisfactory. The size of the lower windows is remarkable for the age, and the details are pure, and are executed with a degree of lightness which we are far from considering as a general characteristic of so early a style.

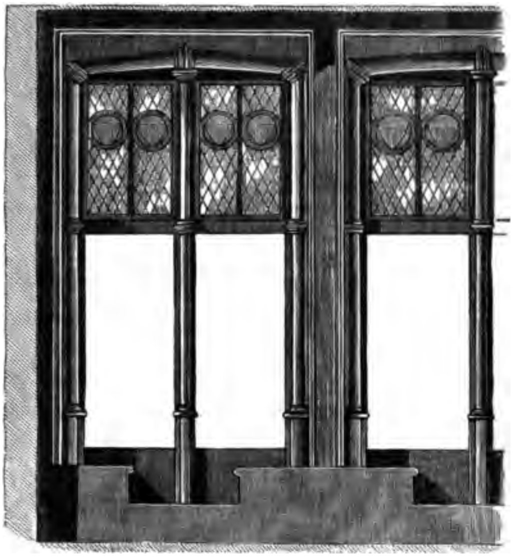


501. Dwelling-house, Cologne. (From Boisserée.)

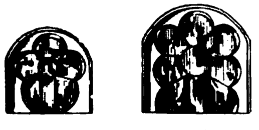
The windows at the back of the house illustrated in Woodcut No. 501, are so large, that were it not for the unmistakeable character of those in front, and of some of its details, we might be inclined to suspect that it belonged to a much more modern age. As shown in the Woodcut No. 502, the details are as light and elegant as anything domestic in architecture of the pointed style.

There are several minor peculiarities which perhaps it might be more regular to mention here, but which it will be more convenient to allude to when speaking of the pointed style. One, however, cannot thus be passed over—and that is the form which windows in churches and cloisters were beginning to assume just before the period when the transition to the pointed style took place.

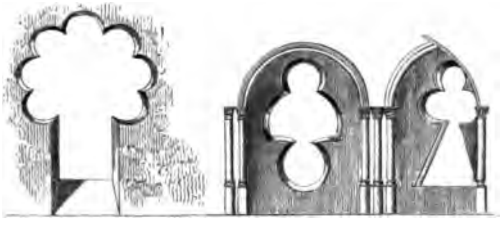
Up to that period the Germans showed no tendency to adopt window tracery, in the sense in which it was afterwards understood, nor to divide their windows into compartments by mullions. I do not even know of an instance in any church of the windows being so grouped together as to suggest such an expedient. All their older windows, on the contrary, are simple round-headed openings, with the jambs more or less ornamented by nook-shafts and other such expedients. At the end of the 12th and beginning of the 13th century they seem to have desired to render the openings more ornamental, probably because tracery had to a certain extent been adopted in France and the Netherlands at that period. They did this first by foiling circles and semicircles; the former a pleasing, the latter a very unpleasing, form of window, but not so bad as the three-quarter windows—if I may so call them—used in the church of Sion at Cologne (Woodcut No. 503) and elsewhere: these, however, are hardly so objectionable as the fantastic shapes they sometimes assumed, as in the examples (Woodcut No. 504), taken from St. Guerin at Neuss. Many others might be quoted, the forms of which are constructively bad without being redeemed by an elegance of outline that sometimes enables us to overlook their other faults. The more fantastic of these, it is true, were seldom glazed, but were mere openings in towers or



502. Back Windows in Dwelling-house, Cologne.

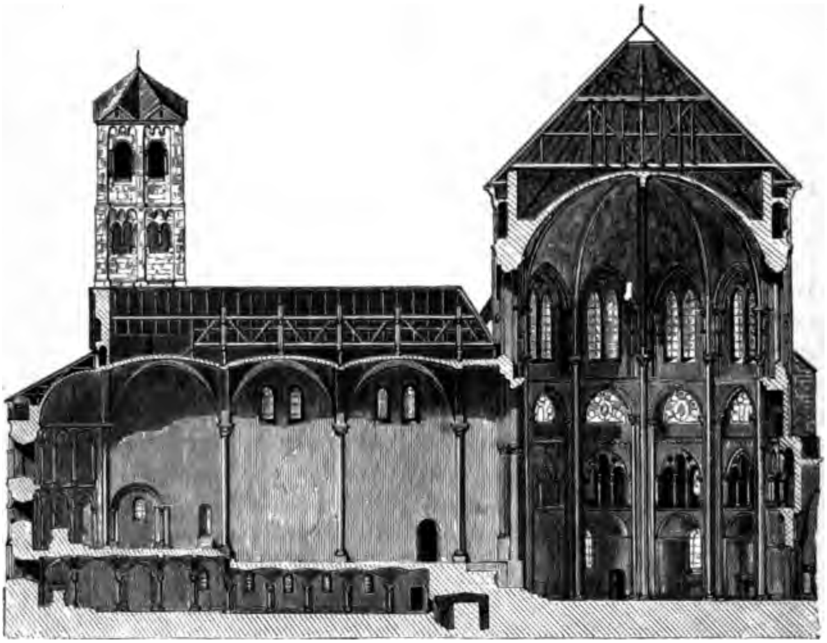


503. Windows from Sion Church, Cologne. (From Boisserée.)

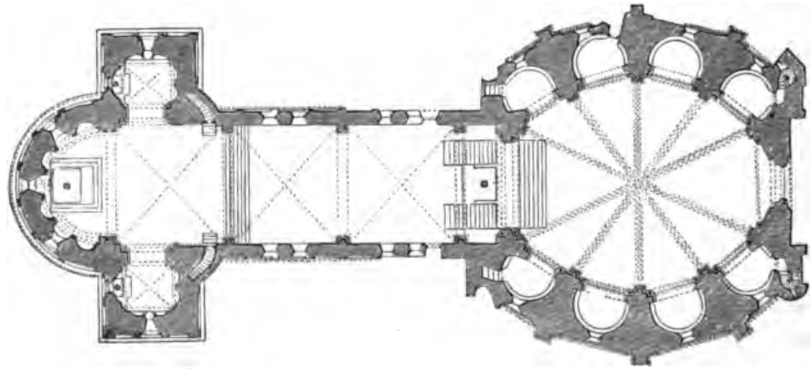


504. Windows from St. Guerin at Neuss. (From Boisserée.)

the features of the old German style, and though pointed arches are introduced, and even tracery to a limited extent, it is still very far removed from being what can be considered an example of the new style.



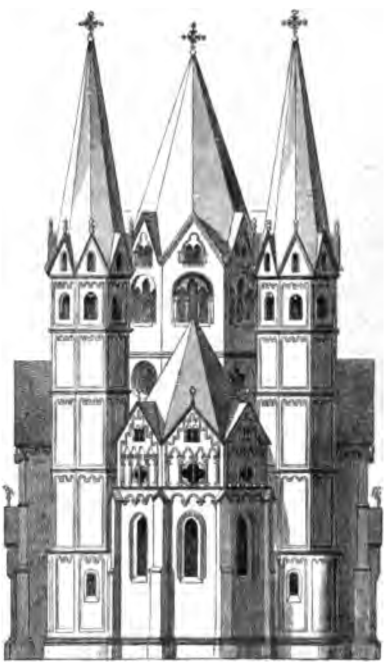
505. Section of St. Gereon, Cologne. (From Boisserée, 'Nieder Rhein.') Scale 50 ft. to 1 in.



506. Plan of St. Gereon, Cologne. (From Boisserée.) Scale 50 ft. to 1 in.

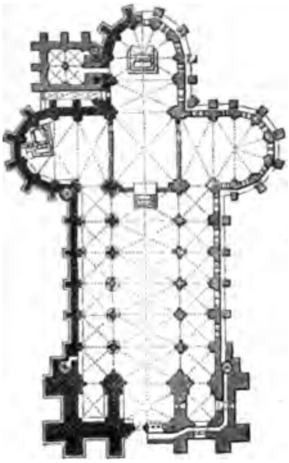
More advanced than either of these is the choir of the cathedral of Magdeburg, said to have been commenced in 1208, and dedicated in 1254. This was built, as before mentioned, to supply the place of the old circular sepulchral church of Otho and his English queen Edith. Hence it naturally took the French chevet form, of which it is, probably, the earliest example in Germany, and which it copies rudely and imperfectly in its details. It possesses the polygonal plan, the graduated buttresses, the decorative shafts, and other peculiarities of the French style, and, if found in that country, would be classed as of about the same age as St. Denis. The upper part of the choir and the nave are of very much later date, and will be mentioned hereafter.

A more interesting example of transition than this is the church at Gelnhausen, unfortunately not of well-known date, but apparently built in the middle of the 13th century, though the choir, it is said, was not finished till 1370. Its interest lies in its originality, for though the pointed arch is adopted, it is in a manner very different from that followed by the French, and as if the architects were determined to retain a style of their own. In general design its outline is very like that of the church at Sinzig (Woodcut No. 478). In it attempts are even made to copy its apsidal galleries, but their purpose is misunderstood, and pillars are placed in front of windows,—a blunder afterwards carried, at Strasburg and elsewhere, to a far more fatal extent. Taken altogether, the style here exhibited is light and graceful; but it neither has the stability of the old round-arched Gothic, nor the capabilities of the French pointed style. The church of Sta. Maria attached to the cathedral at Trèves is another of the anomalous churches of this age (1227 to 1243): its plan has already been given (Woodcut No. 461), and was probably suggested by the form of the old circular building which is supplanted. Perhaps from its proximity to France it shows a more complete Gothic style than either of those already mentioned; still the circular arch continually recurs in doorways and windows, and altogether the uses of the pointed forms and the general arrangement of parts and details cannot be said to be well understood. There is, however, a novelty, truly German, in its plan, and a simplicity about its arrangement, which make it the most pleasing specimen of the age, and standing on the



507. East End of Church at Gelnhausen. No scale.

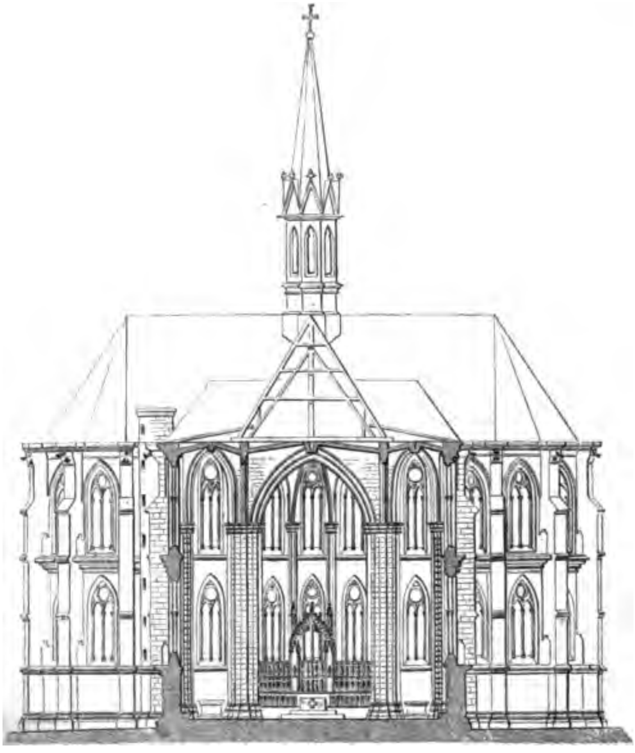
foundation of the old church of Sta. Helena, and grouped with the Dom or cathedral, it yields in interest to few churches in Germany.



508. Plan of the Church at Marburg. (From Moller's 'Denkmäler.') Scale 100 ft. to 1 in.

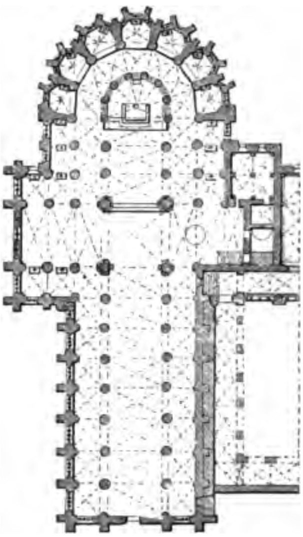
From these we may pass at once to two churches of well-authenticated date and of purely French style. The first that of St. Elizabeth at Marburg, whose name has been already mentioned (p. 46) as adding interest and sanctity to the old castle on the Wartburg. Four years after her death she was canonised, and in the same year, 1235, the foundation was laid of this beautiful church, which was completed and dedicated forty-eight years afterwards, viz., in 1283.

It is a small church, being only 208 ft. in length by 69 in width internally, and though the details are all of good early French style, it still exhibits several *Germanisms*, being triapsal in plan, and the three aisles being



509. Section of Church at Marburg. Scale 50 ft. to 1 in.

of the same height The latter must be considered as a serious defect, for, besides the absence of contrast, either the narrow side-aisles appear too tall or the central one too low. This has also caused the defect of two storeys of windows being placed throughout in one height of wall, and without even a gallery to give meaning to such an arrangement. No French architect ever fell into such a mistake, and it shows how little the builders who could not avoid such a solecism understood the spirit of the style they were copying. The west front with its two spires is somewhat later in date, but of elegant design, and is pleasingly proportioned to the body of the church, which is rarely the case in Germany.

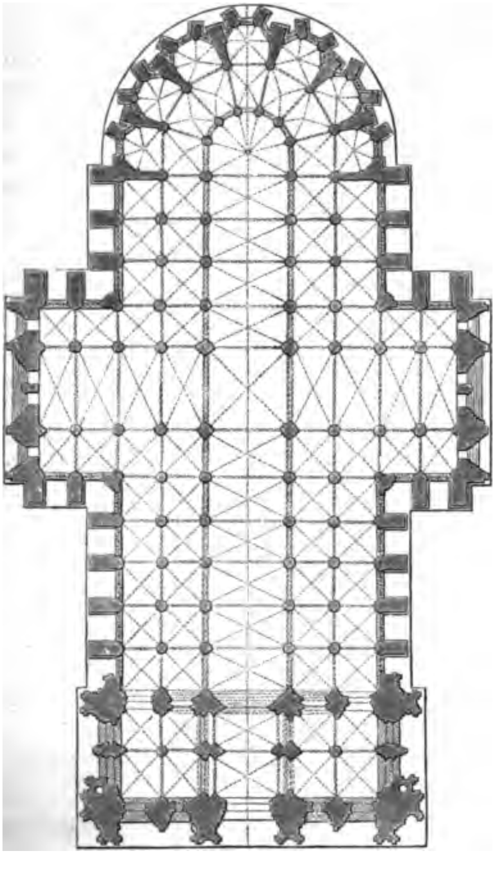


510. Plan of Church at Altenburg. Scale 100 ft. to 1 in.

The other church is that at Altenburg, not far from Cologne, on the opposite side of the river Rhine. The foundation-stone was laid in 1255, and the chapels round the choir completed within a few years of that time, but the works were then interrupted, and the greater part of the church not built till the succeeding century. Like all the early churches of the Cistercian Order it is without towers, and is extremely simple in its outline and decorations. It is, in fact, almost a copy of the abbey of Pontigny (Woodcut No. 409), which was built fully a century earlier, and though it does show some advance in style in the introduction of tracery into the windows, and more variety of outline externally, it is remarkable how little progress it evinces in the older parts. In the subsequent erection there are some noble windows filled with tracery of the very best class, which render this church the best counterpart Germany can produce of our Tintern Abbey, which it resembles in many respects. Indeed, taken altogether, this is perhaps the most satisfactory church of its age and style in Germany, and in the erection of which the fewest faults have been committed. It was rescued from ruin by the late King of Prussia, but its extensive conventual buildings have been destroyed by fire.

These examples bring us to the great typical cathedral of Germany, that of Cologne, which is certainly one of the noblest temples ever erected by man in honour of his Creator. In this respect Germany has been more fortunate than either France or England; for though in the number of edifices in the pointed style and in beauty of design these countries are far superior, Germany alone possesses one pre-eminent example in which all the beauties of its style are united.

Generally speaking, it is assumed that the building we now see is that commenced by Conrad de Hochsteden in the year 1248, but more recent researches have proved that what he did was to rebuild or restore the old double-apse cathedral of earlier date. The examples just quoted, however, were no other proof available, are sufficient to show that the Gothic style was hardly then introduced into Germany, and but very little understood when practised. It seems that the present building was begun about the year 1270 - 1275, and that the choir was completed in all essentials as we now find it by the year 1322.[1] Had the nave been completed at the same rate of progress, it would have shown a wide deviation of style, and the western front, instead of being erected according to the beautiful design preserved to us, would have been covered with stump tracery, and other vagaries of the late German school, all of which are even now observable in the part of the north-west tower actually erected. As the body of the church is complete according to the original design, one of its principal beauties is



511. Plan of Cathedral at Cologne. (From Boisserée.[2]) Scale 100 French ft. to 1 in.

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[1] The best *résumé* of the arguments on this question will be found in the controversy carried on by F. de Verneilh, the Baron de Rosier, and M. Boisserée, in Didron's 'Annales Archéologiques,' vol. vii. *et seq.*

[2] There is a slight error in the scale of this plan, the artist in reducing it having used the scale of French instead of English feet. It ought to be 1-16th larger.

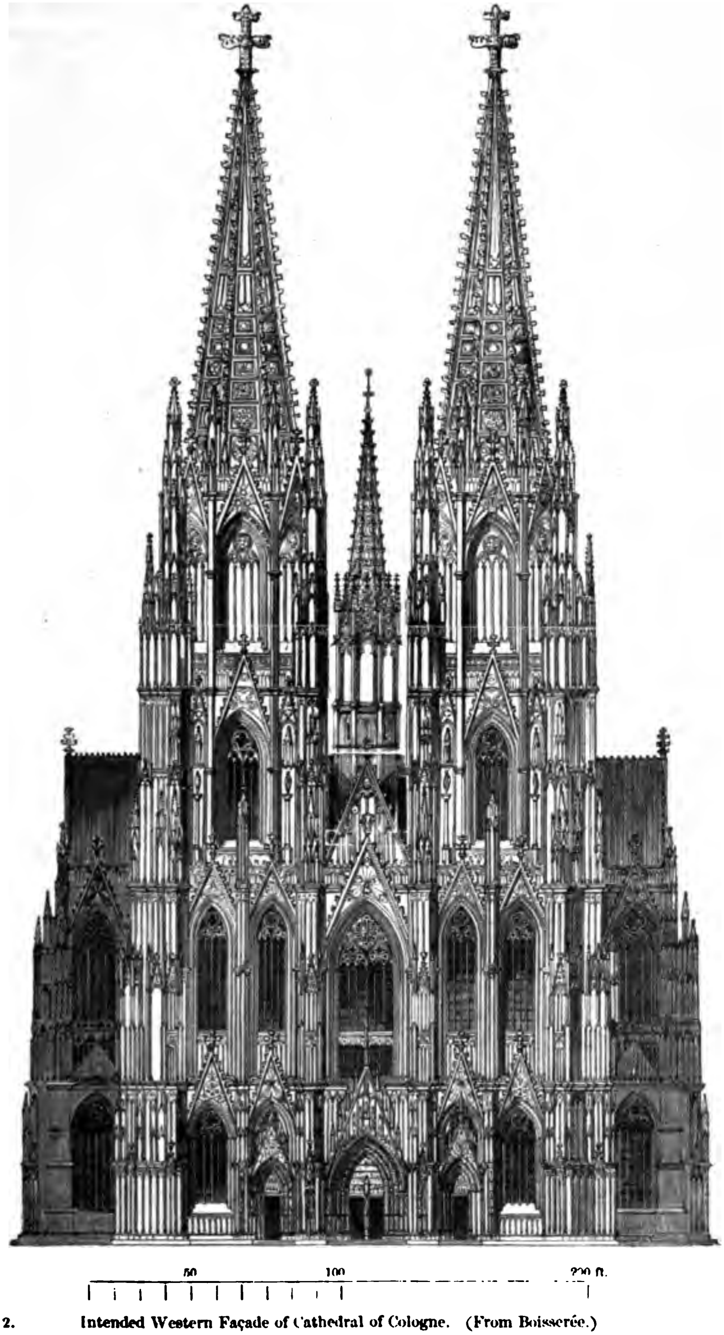
the uniformity of style that reigns throughout, contrasting strongly as it does with the greater number of Northern cathedrals, whose erection spreads over centuries. In dimensions it is the largest cathedral of Northern Europe; its extreme length being 468, its extreme breadth 275, and its superficies 91,464 ft., which is 20,000 ft. more than are covered by Amiens, and one-fourth more than Amiens was originally designed to cover. On comparing the eastern halves of these two from the centre of the intersection of the transept, it will be found that Cologne is an exact copy of the French cathedral, not only in general arrangement, but also in dimensions, the only difference being a few feet of extra length in the choir at Cologne, which is more than made up at Amiens by the projection of the Lady Chapel. The nave. too, at Cologne is one bay less in length. On the other hand, the German building exceeds the French by one additional bay in each transept, the two extra aisles in the nave, and the enormous substructures of the western towers. All these are decided faults of design into which no French architect would have fallen.

Looking at Cologne in any light, no one can fail to perceive that its principal defect is its relative shortness. If this was unavoidable, at least the transept should have been omitted altogether as at Bourges, or kept within the line of the walls, as at Paris, Rheims, and elsewhere. It is true, our long low English cathedrals require bold projecting transepts to relieve their monotony; but at Cologne their projection detracts both internally and externally from the requisite appearance of length. Indeed, this seems to have been suspected at the time, as the façades of the transepts were the least finished parts of the building when it was left, and the modern restorers would have done well if they had profited by the hesitation of their predecessors, and omitted an expensive and detrimental addition.

Another defect before alluded to is the double aisles of the nave. It is true these are found at Paris, but they were an early experiment. At Bourges the fault is avoided by the aisles being of different heights; but in none of the best examples, such as Rheims, Chartres, or Amiens, would the architects have been guilty of dispersing their effects or destroying their perspectives as is done at Cologne, and now that the whole of the interior is finished these defects of proportion are become more apparent than they were before. The clear width of the nave is 41 ft. 6 inches between the piers, its height 155 ft., or nearly four times the width—a proportion altogether intolerable in architecture. And this defect is made even more apparent here by the aisles being together equal in width to the nave, while they are only 60 ft. in height. Besides the defect of artistic disproportion, this exaggerated height of the interior has the further disadvantage of dwarfing to a painful extent the human beings who frequent it. Even the gorgeous ceremonial of the Catholic Church and their most crowded processions lose all their effect by comparison with the building in which they are performed. Were a regiment of Life Guards on horseback to ride down the central aisle at Cologne, they would be converted into pigmies by the 140 ft. of height above them. Lateral spaciousness has not the same dwarfing effect; when all are standing on the same floor, distance does not diminish in a building more than in the open air, and with that effect we are familiar, but great height in a room is unusual, and in proportion as it affects the mind with awe or astonishment does it diminish the appearance of those objects with which we are familiar. Perhaps, however, the most striking defect of the internal design is the want of repose or subordination of parts: 50 pillars practically identical in design, and spaced nearly equally over the floor, and beyond them everywhere a wall of glass. If the four central piers had been wider spaced, or of double the section they now are, or had there been any plain wall or any lateral chapels anywhere, it would have been better. Notwithstanding all these defects, it is a glorious temple; but so mathematically perfect, that not one little corner is left for poetry, and it is consequently felt to be infinitely less interesting than many buildings of far less pretensions.

Externally the proportions are as mistaken, if not more so than those of the interior; the mass and enormous height of the western towers - actually greater, according to the design, than the whole length of the building; if they are ever completed, will give to the whole cathedral a look of shortness, which nothing can redeem. With such a ground-plan a true architect would have reduced their mass one half, and their height by one third at least.

Besides its great size, the cathedral of Cologne has the advantage of having been designed at exactly the best age; while, as before remarked, the cathedrals of Rheims and Paris were a little too early, St. Ouen's too late. The choir of Cologne, which we have seen to be of almost identical dimensions with that of Amiens, excels its French rival internally by its glazed triforium, the exquisite tracery of the windows, the general beauty of the details, and a slightly better proportion between the height of the aisles and clerestory. But this advantage is lost externally by the forest of exaggerated pinnacles which crowd round the upper part of the building, not only in singular discord with the plainness of the lower storey, but hiding and confusing the perspective of the clerestory, in a manner as objectionable in a constructive point of view as it is to the eye of an artist. Decorated construction is, no doubt, the great secret of true architecture; but like other good things, this may be overdone. One-half of the abutting means here employed might have been dispensed with, and the other half disposed so simply as to do the work without the confusion produced. When we turn to the interior to see what the vault is, which this mass of abutments is provided to support, we find it with all the defects of French vaulting—



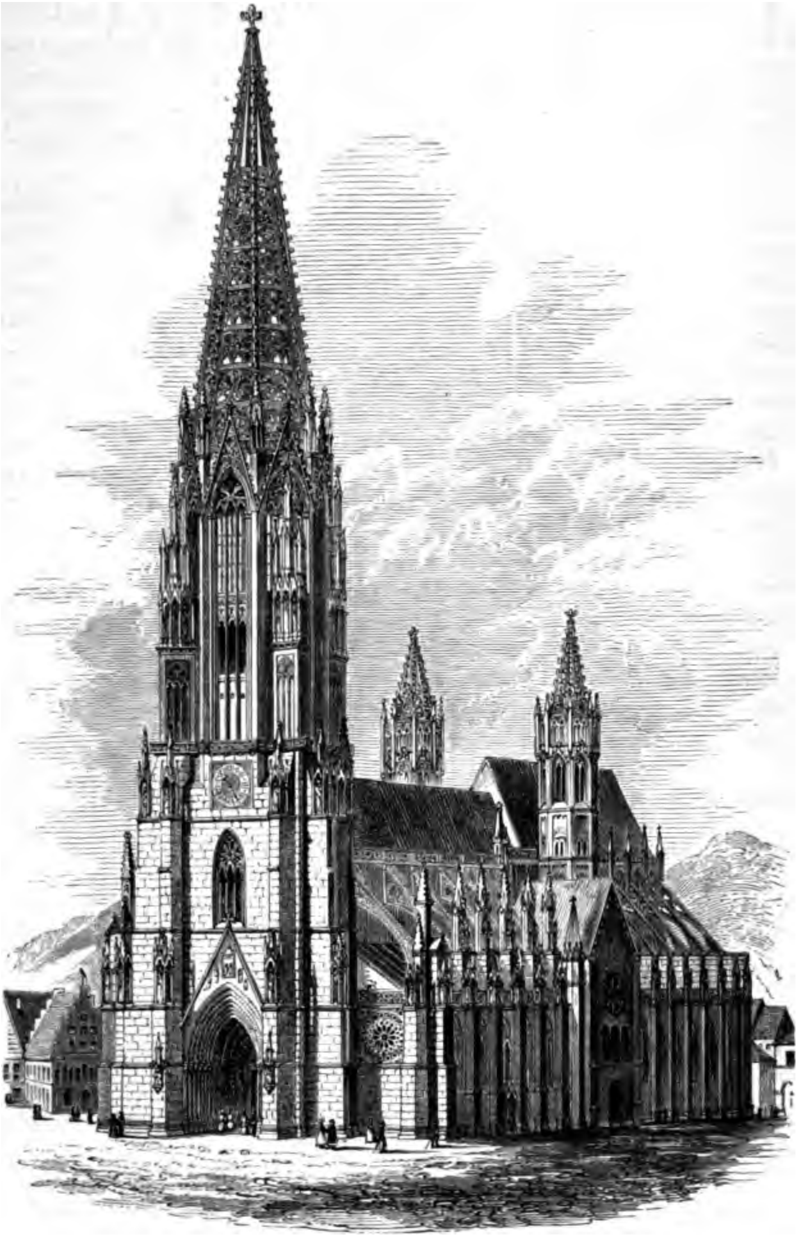
512. **Intended Western Façade of Cathedral of Cologne.** (From Boisserée.)

the ribs few and weak, the ridge undulating, the surfaces twisted, and the general effect poor and feeble as compared with the gorgeous walls that support it. Very judicious painting might remedy this to some extent; but as it now stands the effect is most unpleasing.

The noblest as well as the most original part of the design of this cathedral is the western façade (Woodcut No. 512). Had this been completed, it would have risen to the height of 510 ft. This front, considered as an independent feature, without reference to its position, is a very grand conception. It equals in magnificence those designed for Strasburg and Louvain, and surpasses both in purity and elegance, though it is very questionable if the open work of the spires is not carried to far too great an extent, and even the lower part designed far too much by rule. M. Boisserée says, "the square and the triangle here reign supreme;" and this is certainly the case: every part is designed with the scale and the compasses, and with a mathematical precision perfectly astonishing; but we miss all the fanciful beauty of the more irregular French and English examples. The storeyed porches of Rheims, Chartres, and Wells comprise far more poetry within their limited dimensions than is spread over the whole surface of this gigantic frontispiece. Cologne is a noble conception of a mason, but these were the works of artists in the highest sense of the word.

It is certainly to be regretted that there is no contemporary French example to compare with Cologne, so that we might have been enabled to bring this to a clearer test than words can do. St. Ouen's comes nearest to it in age and style, but it is so very much smaller as hardly to admit of comparison; for though the length of the two churches is nearly identical, the one covers 91,000 square feet, the other little more than half that, or only 47,000. Yet so judicious is the disposition of the smaller church, and so exquisite its proportions, that notwithstanding the late age of its nave, and the inappropriateness of its modern front, it is internally a more beautiful and almost as imposing a church as that of Cologne, and externally a far more pleasing study as a work of art. Had Marc d'Argent commenced his building at the same time as the builder of Cologne, and seen it completed, or had he left his design for it prior to 1322, even with its smaller dimensions, it would have been by far the nobler work of art of the two. These, however, are after all but vain speculations. We see in Cologne the finest specimen of masonry attempted in the Middle Ages; and notwithstanding its defects, we may hope to see in the completed design a really beautiful and noble building, worthy of its builders and of the religion to which it is dedicated.

Fortunately we are not left solely to the drawings of the façade of Cologne to enable us to judge of what the effect of these open-work spires would be if completed; for at Friburg, in the Brisgau, there is



513. View of the Church at Friburg. (From Moller's 'Denkmäler.')

a contemporary example, commenced in 1283, and finished in 1330. This fine spire is identical in style with the Cologne designs, and perhaps on the whole even better, certainly purer and simpler both in outline and detail, though it is not clear that the richer ornament of Cologne would not be more in accordance with this description of lace-work.

The total height of the spire at Friburg is 385 ft. from the ground, and is divided into three parts. The lower portion is a square, plain and simple in its details, with bold prominent buttresses, and containing a very handsome porch. The second is an octagon of elegant design, with four triangular pinnacles or spirelets at the angles, which break most happily the change of outline, and out of this rises, somewhat abruptly, the spire, 155 ft. in height. An English architect would have placed eight bolder pinnacles at its base; a French one would have used a gallery, or taken some means to prevent the cone from merely resting on the octagon. This junction between the two is poor and badly managed; but after all, the question is, whether the open spire is not a mistake, which even the beauty of detail found here cannot altogether redeem. It is not sufficient to say it is wrong, because a spire is and ought to be a roof, and this is not. It is true a spire was originally a roof, and still retains the place of one, and should consequently suggest the idea; but this is not absolutely indispensable; and if the tower be insufficient to support the apparent weight of a solid spire, or for any such reason, the deviation would be excusable, but such is not the case here, nor at Cologne.

Indeed, it seems that the whole is only another exemplification of the ruling idea of the German masons, an excessive love of *tours de force*, and an inordinate desire to do clever things in stone, which soon led them into all the vagaries of their after Gothic; here it is comparatively inoffensive, though I still feel convinced that if one-half the openings of the tracery were filled up, or only a central trefoil or quatrefoil left open in each division, the effect would be far more pleasing and satisfactory.

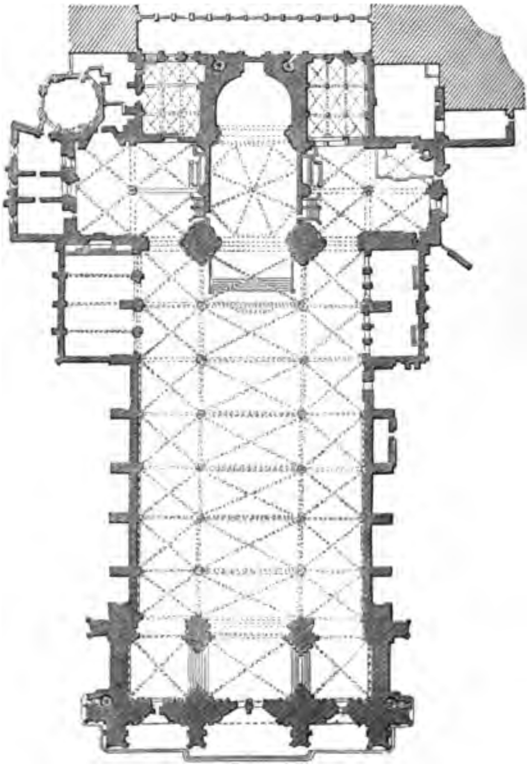
In the spires that flank the transepts, the open work is wholly unobjectionable, owing to the smallness of the scale; but in the main and principal feature of the building the case is very different: dignity and majesty are there required; and the flimsiness, as it might almost be called, of the open work, goes far to destroy this.

The nave of this church is a fair specimen of the German Gothic of the age, being contemporary with the spire, or perhaps of a little earlier date; but the want of the triforium internally, and the consequent heavy mass of plain wall over the pier-arches, give it a poor and weak appearance. The choir, a work of the 15th century, runs into all the extravagance of the later German style, its only merits being its size and lightness.

Of the other open-work spires of Germany, one of the most beautiful is that of Thann in Alsace, in which the octagonal part is so light that anything more solid than the tracery that forms the spires would seem to crush it.

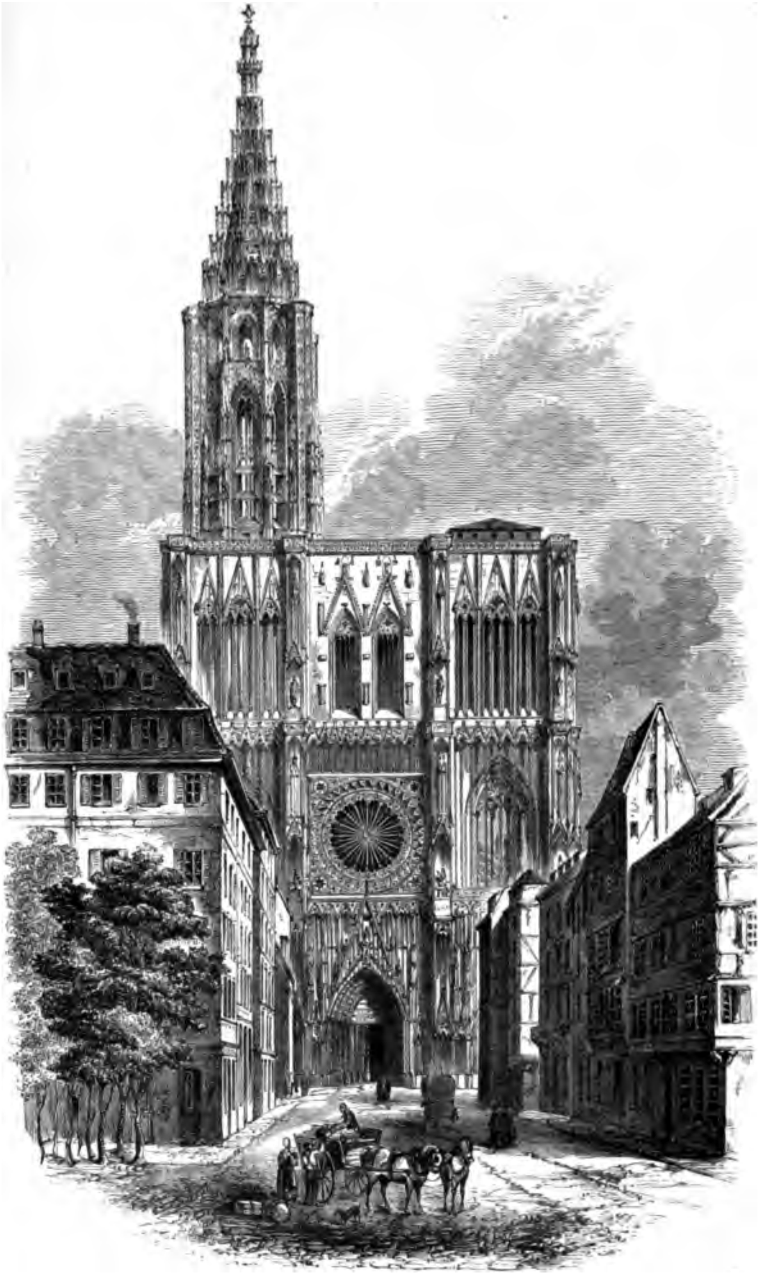
Besides these, there is a pleasing example at Esslingen; another attached to the cathedral at Meissen, in favour of which nothing can be said; and those adorning the two towers of the façade of the cathedral of Berne, which, because they are so small relatively to the towers they surmount, and are in fact mere ornaments, are pleasing and graceful terminations to the front.

Next in rank to Cologne among German cathedrals is that at Strasburg. It is, however, so much smaller as hardly to admit of a fair comparison, covering, even with its subsidiary adjuncts, little more than 60,000 square ft. The whole of the eastern part of this church belongs to an older basilica, built in the 11th and 12th centuries, and is by no means remarkable either for its beauty or its size, besides being so overpowered by the nave, which has been added to it, as to render its appearance somewhat insignificant. The nave and the western front are the glory and the boast of Alsace, and possess in a remarkable degree all the beauties and defects of the German style.



514. Plan of Strasburg Cathedral. Scale 100 ft. to 1 in.

It is not known when the nave was commenced, but probably in the early half of the 13th century, and it seems to have been finished about the year 1275, a date which, if authentic, is in itself quite sufficient to settle the controversy as to whether any part of Cologne



515. West Front of Cathedral at Strasburg.

is of an earlier age, everything we see in Strasburg being of an older style than anything in that church.

Be this as it may, the details are pure and beautiful, and the design of singular boldness. The central aisle is 55 ft. wide from centre to centre of the piers, and the side-aisles 33 ft. wide, while the corresponding dimensions at Cologne are only 49 ft. and 25 ft. respectively. Notwithstanding this, the vault at Strasburg is only 101 ft. in height against 155 ft. at Cologne. The consequence is, that measured from centre to centre the central aisle at Cologne is more than three times as high as it is wide, while at Strasburg it is less than twice. The whole width of the more northern example is practically equal to the height—at Strasburg it is one-fifth less; but the one having only three aisles, while the other has five, makes all these discrepancies still more apparent. Had the architect of Cologne, instead of introducing an external aisle, only increased the dimensions of Strasburg by one-fifth, retaining all its proportions, he would both externally and internally have produced the noblest building of the Middle Ages. As it is, the smaller nave of Strasburg is infinitely superior in proportion and apparent dimensions to that of the larger building.

This comparative lowness of the nave at Strasburg is greatly in its favour, as the length, which is only 250 ft., is made the most of, and the shortness of the cathedral is not perceived.

It does not appear that Erwin von Steinbach had anything to do with this part of the structure, beyond repairing the vault when damaged by fire in 1298, at which time he also introduced some new features of no great importance, but sufficient in some degree to confuse the chronology. What he really did, was to commence the western façade, of which he laid the foundation in 1277, and superintended the erection till his death, 41 years afterwards, when he was succeeded by his sons, who carried it up to the platform in 1365.

The Germans, however, wishing to find a name to place in their Walhalla, and mistaking entirely the system on which buildings were carried out in the Middle Ages, have tried to exalt Erwin into a genius of the highest order, ascribing to him not only the nave, but also the design of the spire as it now stands. If he had anything to do with the former, he must have been promoted at a singularly early age to the rank of master-mason, and have been a most wonderfully old man at the time of his death; and if he designed the spire, he must have had a strangely prophetic spirit to forsee forms and details that were not invented till a century after his death! The fact is, Erwin did no more than every master-mason of his age could do. There is no novelty or invention in his design, and only those mistakes and errors which all Germans fell into when working in pointed Gothic. In the first place, the façade is much too large for the church, which it crushes and hides; and instead of using the resources of his art to conceal this defect, he made the vault of the ante-chapel equal in height to that of Cologne, the result being that the centre of the great western rose-window is just as high as the apex of the vault of the nave. It is true it can be seen in perspective from the floor of the church, but the arrangement appears to have been expressly designed to make the church look low and out of proportion.

The spiral staircases at the angles of the spire are marvels of workmanship, and the whole is well calculated to excite the wonder of the vulgar, though it must be condemned by the man of taste as very inferior in every respect to the purer designs of an earlier age.

It is not known whether the original design comprised two towers, like those of the great French cathedrals, or was intended to terminate with a flat screen-like façade. Probably the latter was the case, as mass, and not proportion, seems to have been this architect's idea of magnificence.

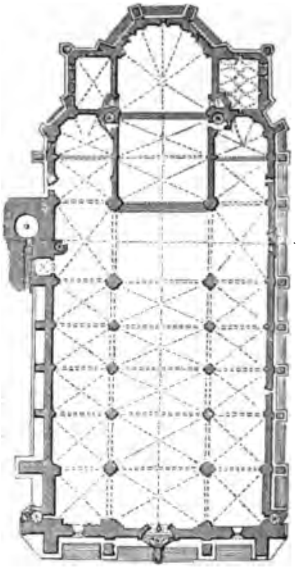
The spire that now crowns this front, rising to a height of 468 ft. from the ground, was not finished till 1439, and betrays all the faults of its age. The octagonal part is tall and weak in outline, the spire ungraceful in form, and covered with an unmeaning and constructively useless system of tracery.

Besides the fault of proportion for which the design of Erwin is clearly blamable, all his work betrays the want of artistic feeling which is characteristic of the German mason. Every detail of the lower part of the front is wire-drawn and attenuated. The defect of putting a second line of unsymmetrical tracery in front of windows, the first trace of which was remarked upon in speaking of Gelnhausen, is here carried to a painful extent. The long stone bars which protect and hide the windows are admirable specimens of masonry, but they are no more beauties than those which protect our kitchen windows in modern times. The spreading the tracery of the windows over the neighbouring walls, so as to make it look large and uniform, is another solecism found both here and at Cologne, utterly unworthy of the art, and not found in, I believe, a single instance in France and England, where the style was so much better understood than in Germany.

Altogether the façade of the cathedral at Strasburg is imposing from its mass, and fascinating from its richness; but there is no building in either France or England where such great advantages have been thrown away in so reckless a manner and by so unintelligent a hand.

The cathedral at Ratisbon is a far more satisfactory specimen of German art than that of Strasburg. It is a small building, only 272 ft. in length, and 114 in breadth internally, and covering about 32,000 sq. ft. It was commenced in the year 1275; the works were continued for more than two centuries, and at last abandoned before the completion of the church.

As will be seen from the plan (Woodcut No. 516), it is much more German than French in its arrangements, having three apses instead of a chevet. The side-aisles are wide in proportion to the central one, the transept subdued, and altogether it is more like the old round-arched Gothic basilica than the French church. It has two storeys of windows in the apse, as at Marburg, where the arrangement is unmeaning and offensive, while here the nave has side-aisles and a clerestory: thus the upper windows of the apse are a continuation of the clerestory windows of the nave, and the effect is not unpleasing. The details of this church are singularly pleasing and elegant throughout, and produce on the whole a harmony not commonly met with in German churches of this age and style.

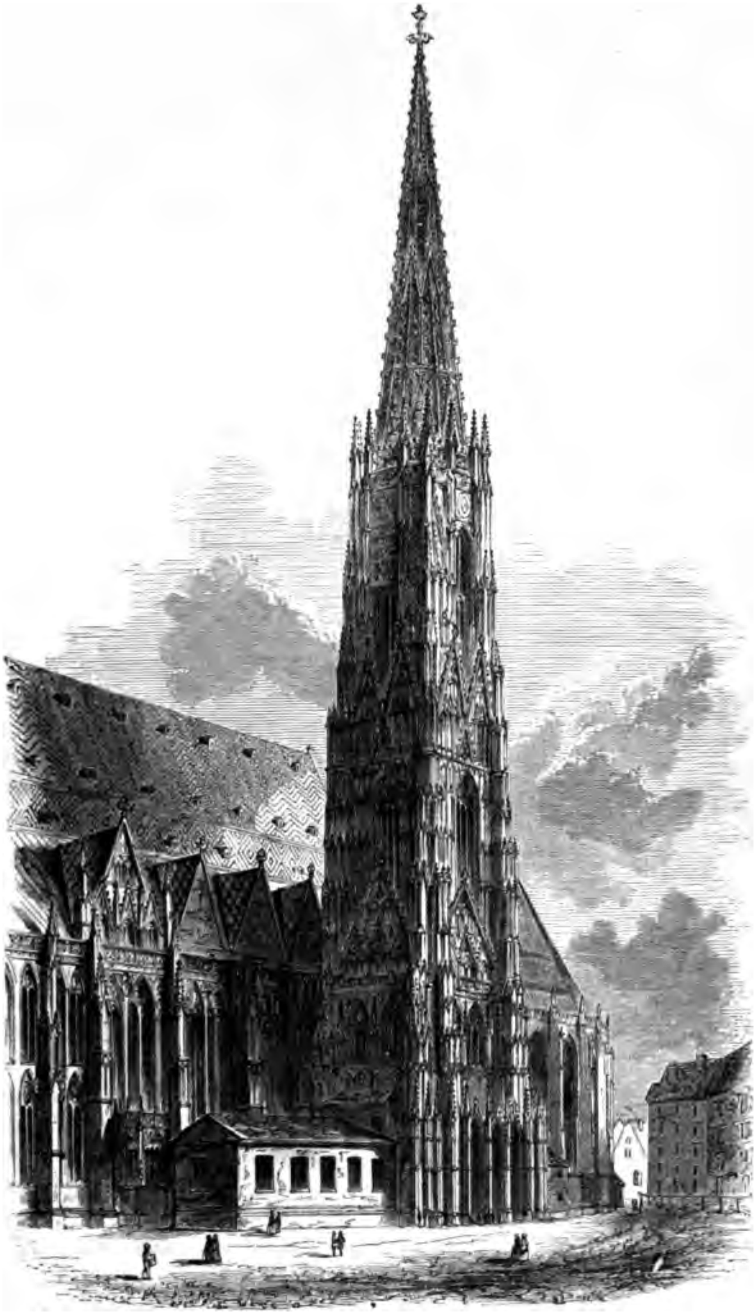


516. Plan of Ratisbon Cathedral.
Scale 100 ft. to 1 in.

If size were any real test of beauty, the cathedral at Ulm ought to be one of the finest in Germany, being just twice as large as that at Ratisbon, covering 63,800 ft. So far also as constructive merit is concerned, it is perhaps the best; for though I have no plan I can quite rely upon, I believe that not more than one-fifteenth of the area is occupied by the supports; nor is this church surpassed by many in sharp and clever mechanical execution of the details. With all this it would be difficult to find a colder and more unimpressive design than is here carried out; both internally and externally, it is the work of a very clever mason, but of a singularly bad artist. The freemasons had, when it was founded (1377), got possession of the art in Germany; and here they carried their system to its acmé, and with a result which every one with the smallest appreciation of art can perceive at once. It is said that, in the original design, the outer range of pillars, dividing the side-aisle into two, was to have been omitted, which would have made it even worse than it is. Its one western tower, had it been completed, would have been more beautiful than that at Strasburg; and, besides, being actually higher (483 ft., according to the still-preserved design), would have appeared taller from standing alone. Its form, too, is more pleasing; and, though its details are far more suited for execution in cast iron than in stone, it would have rivalled, perhaps surpassed, those at Antwerp or Mechlin. It was, however, carried to the height of only 220 ft., when, either from the want of funds or the failure of the foundation, the work was abandoned.

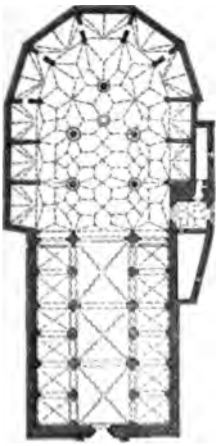
St. Stephen's of Vienna ranks fourth or fifth among the great churches of Germany, both for size and richness of decoration. Its length, internally, is 337 ft., its width 115, and it covers about 52,000 square ft. It is situated too near the eastern edge of the province for us to expect anything very pure or perfect as an example of Gothic art, and it certainly sins against every canon that a purist would enact. The three aisles are nearly equal in width and height,—there is no clerestory—no triforium. There are two very tall windows in each bay. The pillars are covered with sculpture, more remarkable for its richness than its appropriateness, and the tracery of the vaults is very defective. Yet, with all these faults, and many more, no one with a trace of poetry in his composition can stand under the great cavernous western porch and not feel that he has before him one of the most beautiful and impressive buildings in Europe. A good deal of this may be owing to the colour. The time-stain in the nave is untouched, the painted glass perfect, and the whole has a venerable look, now too rare. The choir is being smartened up, and its poetry is gone. Meanwhile, no building can stand in more absolute contrast with the cathedral at Cologne than this one at Vienna. The former fails because it is so coldly perfect that it interests no one; this impresses, though offending against all rules, because it was designed by a poet. We feel as if the Rhenish architect would certainly have been Senior Wrangler at Cambridge had he tried, but that his Danubian brother was fit to be Laureate at any court in Germany.

It is the same with the exterior. The one great roof running over the three aisles, and covering all up like an extinguisher, ought to be abominable, but it gives a character to the whole that one would be sorry to miss, and is not out of harmony with the exceptional character of the whole building. The great glory of this church consists in its two spires, one of which is finished, the other only carried up to about one-third of its intended height. Their position is unfortunate, as they are placed where the transepts should be, so that they neither form a façade nor dignify the sanctuary; they occupy, in fact, the position of the lateral entrances which the Germans were so fond of, and are the principal portals of the building. In itself, however, the finished spire is the richest, and, excepting that at Friburg, perhaps the most beautiful of all those in Germany. Its total height, exclusive of the eagle, is 441 ft., rising from a base of about 64 ft. square, gradually sloping from the ground to the summit, where it forms a cone of the unprecedently small angle of little more than 9 degrees. The transition from the square base to an octagonal cone is so gradual and so concealed by ornament, that it is difficult to say where the tower ends and the spire begins. This gives a confusion and weakness to the design by no means pleasing. Indeed the whole may be taken as an exemplification of all the German principles of design carried

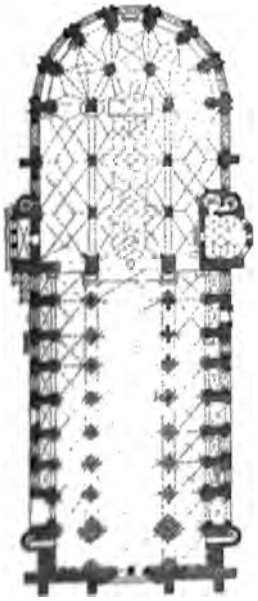


517. View of the Spire of St. Stephen's, Vienna. (From 'Chiesi Principali d' Europa.')

to excess, rather than as a perfect example of what such an object should be. It deserves to be remarked that there is no open work in the spire, though, from its own tenuity and the richness of the tower, there is no example where it would have been less objectionable.



518. Plan of the Franciscan Church at Salzburg. Scale 100 ft. to 1 in.



519. Plan of St. Laurence's Church, Nuremberg. Scale 100 ft. to 1 in.

Had the architects of Eastern Germany continued to practise the style a little longer before the introduction of the Renaissance art, it is probable they would have gone further from the French forms than they did even in St. Stephen's. Among the novelties they did employ, one of the most remarkable was the invention of flat-roofed choirs. The plan of the Franciscan church at Salzburg (Woodcut No. 518) will explain what is meant by this.[1] The nave of the church is a very beautiful example of the round-arched style, so pure and elegant in its details as to betray its proximity to Italy, and without a trace of pointed architecture, though dating as late as 1230–1260. In the year 1470 it was determined to rebuild the choir. In France this would have been effected by an extended range of chapels round a chevet; in England by several bays added to the length. In Germany they did better: they placed five slender piers on the floor; these, though 70 ft. in height, are less than 4 ft. in diameter, yet they appear sufficient for the task they have to perform, while their slenderness prevents them from interrupting the view in any direction. From these rose a vault, extending on the same level from wall to wall with a tree-like growth, from each of these pillars—without any exertion or constructive difficulty; the choir thus forms a hall 66 ft. wide by 160 in length, exclusive of the side-chapels which surround it in two storeys. A dome in that position might have been more sublime; but passing through the confined vestibule of the nave the expansion into the light and airy choir produces one of the most magical effects to be found in any church in Europe. The details of the vault, as is only too usual at that age, are not constructively correct; but if this design had been carried out with English fan-tracery nothing could well be more beautiful. In plan and dimensions this choir very nearly resembles Henry VII.'s Chapel at Westminster; but in design the German surpasses the English example to a greater extent than it falls short of it in beauty of detail.

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[1] From the 'Jahrbuch der Central Commission zur Erhaltung der Baudenkmale,' vol. II. p. 117.

St. Lawrence's Church at Nuremberg is a larger and better known example of the same class of design. It was commenced in 1275, and finished after 202 years' labour. The style of this church is consequently much more uniform; and though not large, being only 300 ft. long by 100 in width, its proportions are so good that it is a very beautiful and impressive example of the style. It is a little too late in its details, but beautiful in its arrangements. The view, standing by the pulpit and looking towards the east, is as poetic as that of St. Stephen's, and as spacious as at Salzburg. The two rows of windows round the apse are a defect that might easily have been avoided, but which the beauty of the painted glass goes far to redeem.

Externally, the western front, though on a small scale, only 250 ft. in height, is better proportioned and more pleasing in its detail than almost any other double-spire façade in Germany that can be named. The real defect of the exterior is the overwhelming roof of the nave and the want of external buttresses, which, with bold pinnacles, would have gone far to correct its heaviness.

St. Sebald's Church at Nuremberg seems originally to have been a chevet turned the wrong way, to the eastern end of which a choir of somewhat exaggerated dimensions was added at a later age (1303–1377). This choir was not only placed unsymmetrically as regards the axis of the older part, but also as regards its own parts. It is, however, lofty and airy, with the same arrangement as to vaulting as the two last examples, but, being lighted by a single row of tall windows, it avoids the defect of the two-storeyed arrangement. These windows are 50 ft. high, and barely 8 ft. in width, which is far too narrow in proportion. Their mullions are nearly 40 ft. in height; and, though triumphs of German masonic skill, are most unpleasing features of architectural design.

When the Germans had once mastered this invention in vaulting they applied it wherever an opportunity presented itself, and in one instance at least, to a five-aisled basilica. It is true the church of St. Barbara at Kuttenberg,[1] in Bohemia, is only a fragment, but it is a very remarkable one. The building was apparently commenced about the year 1358, and completed, as far as we now see it, in 1548.

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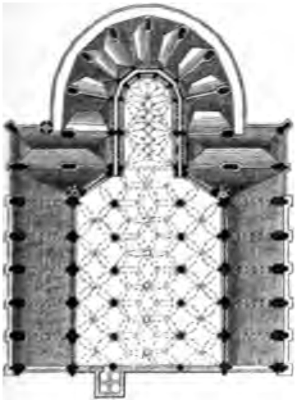
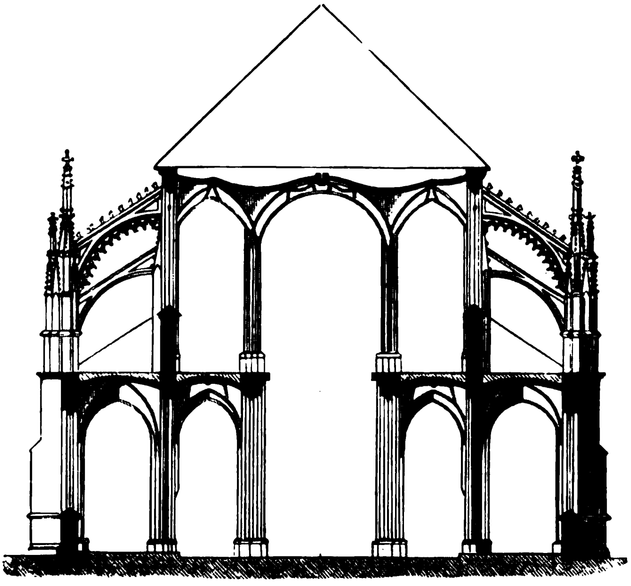
[1] See 'Mittelalterliche Kunstdenkmale Östereichs,' vol. i. p. 171.

Its dimensions are smaller than those of Cologne, being only 126 ft. across its five aisles instead of 150; but its great peculiarity is that the roof of the first aisle next the central one on either side is converted into a great gallery, as shown in the section (Woodcut No. 521), and the vault carried flat above the three. To a certain extent this prevents the clerestory windows from being so easily seen from all parts of the floor of the church, but when seen it is at a better angle; and, altogether, a play of light and shade and a poetry of effect is introduced which more than compensates for this. The double apse may be the most characteristic feature of German Mediæval churches, but this seems to be the highest and most poetic of their inventions.



520. Plan of the Church at Kuttenberg, taken above the roof of the aisles. Scale 100 ft. to 1 in.



521. Section of the Church of St. Barbara, Kuttenberg. Scale 50 ft. to 1 in.

The church of St. Veit at Prague is very similar to that at Kuttenberg. It was commenced about the year 1346, and, like it, was meant to imitate and rival Cologne. Its proportions, however, are better, being only 105 ft. high, internally, with a width of 130 ft., but its details, as might be expected from its date, are very far inferior to those of its northern rival. Like Kuttenberg, it is now only a choir—a fragment of what was intended; and it neither possesses the poetry of its Bohemian rival, nor the perfect masonry of Cologne, and perhaps more resembles Beauvais than any other church of its age.

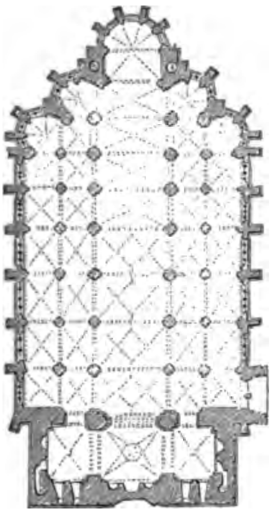
In Bavaria there are several churches erected later in the style, which, in spite of many defects of detail, are still very imposing edifices. The cathedral at Munich is a well-known example of this style, but a better specimen is the St. Martin's church at Landshut (1404). As in almost all these examples, the three aisles are the same height, and outside are covered by one gigantic roof. Internally this gives great spaciousness, but externally the exaggerated height of the windows and the size of the roof are great defects. The most beautiful feature at Landshut is the spire, which rises to the height of 425 ft., and is as gracefully and appropriately designed as any other which has been completed in Germany of its age. Though not so rich as St. Stephen's at Vienna, it has not its confusion of outline, and it also avoids the somewhat ambiguous beauties of the open-work spires so frequent in this country.

In adopting the pointed-arched style, the Germans generally abandoned their favourite double-apse arrangement; and though they seldom adopted the whole of the chevet, preferring their own simple apse to it, it seems to have been only, or at least generally, where an old round Gothic double-apse church existed previously, that this arrangement was continued after the commencement of the 13th century. Naumberg, the nave of which was commenced about the year 1200, is an instance of this. This was no doubt inserted between two older apses, both of which were rebuilt at a later age, forming two very beautiful and extensive choirs. The whole makes a very pleasing and interesting church, though there certainly is an architectural incongruity in entering by the side, and the double-apse arrangement is unfamiliar and nearly unintelligible to us at the present time.

A still better example is the cathedral at Bamberg, which, judging from its date, ought to be in the complete pointed style. Though its east end dates from 1220, and the west 1257, it is still so completely transitional, and the pointed form so timidly used, that in France it would certainly be said that there was a mistake of at least a century in these dates. It is nevertheless a very fine church; and its four elegant towers flanking the two apses give it a local and at the same time a dignified character which we often miss in the imitations of French churches, too common at this age. At Naumberg unfortunately only three towers exist, the fourth never having been erected, which considerably mars the effect when comparing it with the more complete edifice at Bamberg.

Augsburg is another example of this class; although of a good age, the rebuilding having commenced in 1366, it is one of the ugliest and worst-designed buildings in Germany, with nothing but its size to redeem it. It is peculiar in having a chevet at one end and an apse at the other.

The principles of the French schools of art seem to have prevailed to a much greater extent in the North of Germany, and we have in consequence several churches of more pleasing design than those last mentioned. Among these is the cathedral at Halberstadt, a simple but beautiful church, not remarkable for any very striking peculiarities, but extremely satisfactory in general effect. The great church, too, at Xanten may be quoted as another very favourable specimen, though far more essentially German in its arrangement. The western front is older than the rest, and is German, wholly without French influence. It has no central entrance, but has two bold massive towers. The church behind these is of the latter part of the 13th and the 14th centuries. It is generally good in detail and proportion, but is arranged, as seen in the plan, in a manner wholly different from the French method, though in a form common in all parts of Germany. The polygonal form is retained both for the apse and for the chapels, but without adopting the chevet with its surrounding aisle, nor the absolute seclusion of the choir as a priestly island round which the laity might circulate, but within whose sacred precincts they were not permitted to enter. It is observable that in those districts where chevets are most frequent, generally speaking, the Catholic religion has had the firmest hold. On the other hand, where the people had declined to adopt that arrangement, it was a sign that they were ripe for the Reformation, which accordingly they embraced as soon as the standard of rebellion was raised.



522. Plan of Church at Xanten.
Scale 100 ft. to 1 in.

In the South of Germany we have already had occasion to remark on the tendency to raise the side-aisles to the same height as the central one, which eventually became the rule in the great brick churches of Munich and other parts of Bavaria, the piers or pillars becoming mere posts supporting what was practically a horizontal roof. In the north the tendency seems to have been the other way—to exaggerate the clerestory at the expense of the aisles. A notable example of this is found in the nave at Magdeburg, where the side-aisles are practically little more than one-third of the whole height of the church; and there being no triforium, the clerestory windows rest apparently on the vault of the side-aisle. This has now no doubt a disagreeable effect, but when filled with painted glass the case must have been different, and the effect of this immense screen of brilliant colours must have been most beautiful.

A better example of this arrangement is found in the cathedral at Metz, where, from its proximity to France, the whole style was better understood, and the details are consequently more perfect. Externally, it must be confessed, the immense height of the clerestory gives to the church a wire-drawn appearance, very destructive of architectural beauty; but internally, partly from the effect of perspective and partly from the brilliancy of such glass as remains, criticism is disarmed. The result, however contrary to the rules of art, is most fascinating; and at all events, though an error, it is in a far more pleasing direction than that of the southern architects.

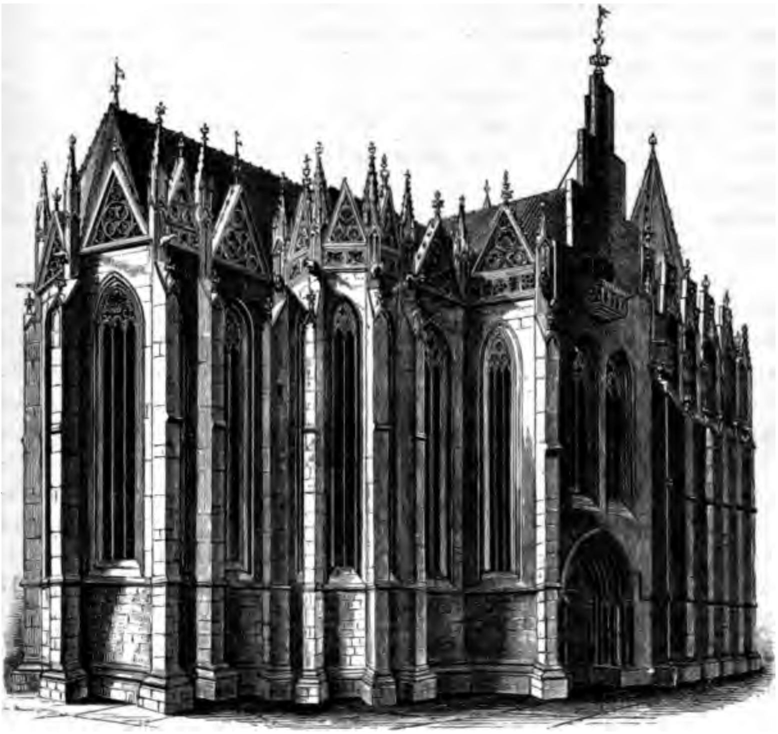
These may perhaps be considered the great and typical examples of the pointed style as applied to church architecture in Germany; but besides these there are numerous examples scattered all over the country, many of which, as being less directly under French influence, display an originality of design, and sometimes a beauty, not to be found in the larger examples.

Among these is the church at Limburg on the Lahn. This building belongs to the early part of the 13th century, and exhibits the transitional style in its greatest purity, and with less admixture of foreign taste than is to be found in almost any subsequent examples. Though measuring only about 180 ft. by 75, it has, from its crown of towers and general design, a more imposing appearance externally than many buildings of far larger dimensions. The interior is also singularly impressive.

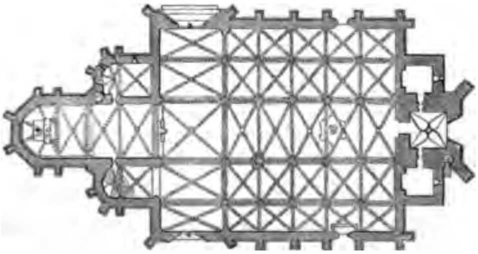
The church of St. Emeran at Ratisbon, a square building of about the same age and style, is chiefly remarkable for the extensive series of galleries which surround the whole of the interior, being in fact the application of the system of double chapels (see p. 32) to a parish church; not that vaulted galleries are at all rare in Germany, but that generally speaking they are insertions; though here they seem part of the original design.

At Schulporta in Saxony there is a very elegant church of the best age, and both in design and detail very different from anything else in Germany. Its immense relative length gives it a perspective rarely found in this country, where squareness is a much more common characteristic.

At Oppenheim is a church the choir of which is a simple and pleasing German apse with elongated windows. The nave, four bays in length, is an elaborate specimen of German ornamentation in its utmost extravagance, and, considering its age, in singularly bad taste, at least the lower part. The clerestory is unobjectionable, but the tracery of the windows and walls of the side-aisles shows how ingeniously it was possible to misapply even the beautiful details of the early part of the 14th century. In St. Werner's Chapel, Bacharach, on the Rhine, this is avoided, and, as far as can be judged from the fragment that remains, it must, if it ever was completed, have been one of the best specimens of German art in that part of the country. The nave of the cathedral at Meissen, though marked by many of the faults of German design, is still a beautiful example of well-understood detail.



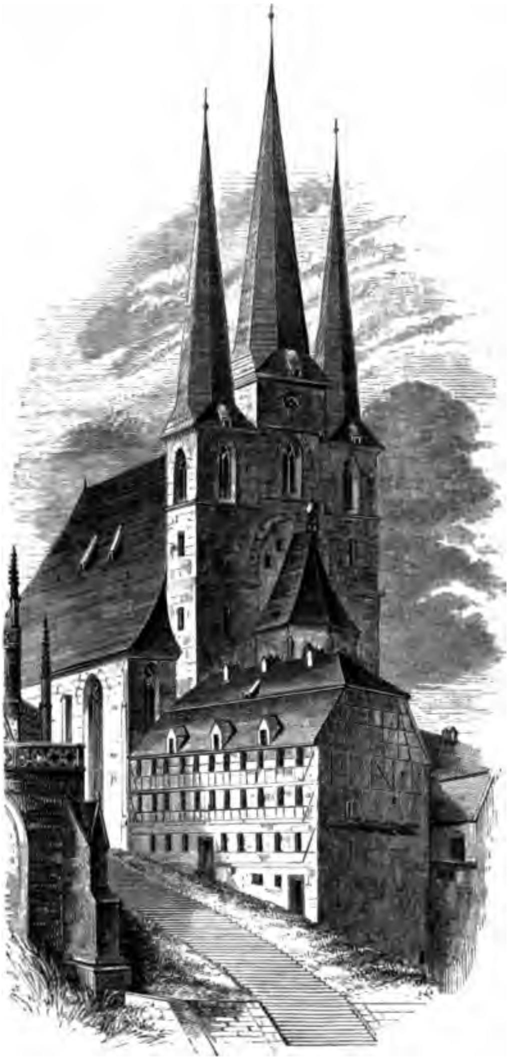
523. View of Maria Kirche at Mulhausen. (From Puttrich, 'Denkmäler.')



524. Plan of Maria Kirche at Muhlhausen. Scale 100 ft. to 1 in.

As a purely German design nothing can surpass the Maria Kirche at Muhlhausen (Woodcut No. 524). The nave is nearly square, 87 ft.

by 105, and is divided into five aisles by four rows of pillars supporting the vaults, all at the same level. To the west is a triple frontispiece, and to the east (Woodcut No. 523) the three apses, which form so favourite an arrangement with the Germans. Externally its attenuation is painful to one accustomed to the more sober work of French architects; but this fault is not here carried to anything like the excess found in other churches. Internally the effect is certainly pleasing, and altogether there are perhaps few better specimens of purely German design in pointed architecture. The church of St. Blasius, in the same town, is far from being so good an example of the style.



525. St. Severus Church at Erfurth. (From Puttrich, 'Denkmäler.')

The cathedral at Erfurth is a highly ornamented building, but, though possessing beautiful details in parts, yet it shows the slenderness of construction which is so frequent a fault in German Gothic buildings. The church of St. Severus in the same town resembles that at Muhlhausen, but possesses so characteristic a group of three spires[1] over what we would consider the transept—or just in front of the apse—that it is illustrated (Woodcut No. 525). It certainly looks like a direct lineal descendant from the old Roman basilican apse grown into Gothic tallness. Though common in Germany, placed either here or at the west front, I do not know of any single example of such an arrangement either in France or England.

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[1] The façade designed for the cathedral at Louvain (mentioned vol. i. p. 597) was identical with this group of spires in arrangement, though on a much larger scale, and infinitely richer in ornament.

To the same class of square churches with slightly projecting chancels belongs the Frauen Kirche at Nuremberg, one of the most ornate of its kind, and possessing also in its triangularly formed porch another peculiarity found only in Germany. The principal entrances to the cathedrals of Ratisbon and Erfurth are of this description—the latter being the richest and boldest porch of the kind.

One of the best known examples of the daring degree of attenuation to which the Germans delighted to carry their works is the choir (Woodcut No. 489) added in 1353 and 1413 to the old circular church of Charlemagne at Aix-la-Chapelle. As we now see it, the effect is certainly unpleasing: but if these tall windows were filled with painted glass, and the walls and vaults coloured also, the effect would be widely different. Perhaps it might then be even called beautiful; but with scarcely a single exception all those churches are now deprived of this most indispensable part of their architecture, and, instead of being the principal part of the design, the windows are now only long slits in the masonry, giving an appearance of weakness without adding to the beauty or richness of the ornament.

The same remarks apply to the Nicholai Kirche at Zerbst, and the Petri Kirche at Gorlitz, both splendid specimens of this late exaggerated class of German art. By colour they might be restored, but as seen now in the full glare of the cold daylight they want almost every requisite of true art, and neither their size nor their constructive skill suffices to redeem them from the reproach.

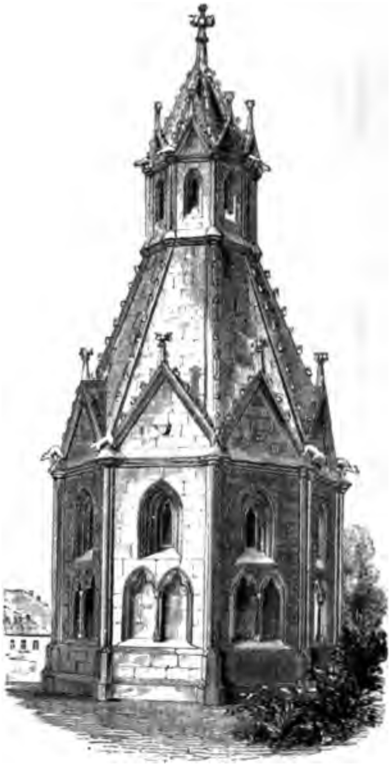
CHAPTER VI.

CONTENTS.

Circular Churches — Church Furniture — Civil Architecture.

Circular Churches.

In adopting the pointed style, the Germans almost wholly abandoned their old favourite circular form; the Liebfrauen Church at Trèves (Woodcut No. 460) being almost the only really important example of a church in this style approaching to a rotunda. Chapter-houses are as rare in Germany as in France, and those that are found are not generally circular in either country. There is a baptistery attached to the cathedral at Meissen, and one or two other insignificant examples elsewhere; but the most pleasing object of this class is the Anna Chapel, attached to the principal church at Heiligenstadt. It is said that it always was dedicated to the sainted mother of the Virgin, but it would require more than tradition to prove that it was not originally designed as a baptistery or a tomb-house. Be this as it may, it is one of the most pleasing specimens of its class anywhere to be found, and so elegant as to make us regret the rarity of such structures.



526. Anna Chapel at Heiligenstadt. (From Puttrich, 'Denkmäler.')

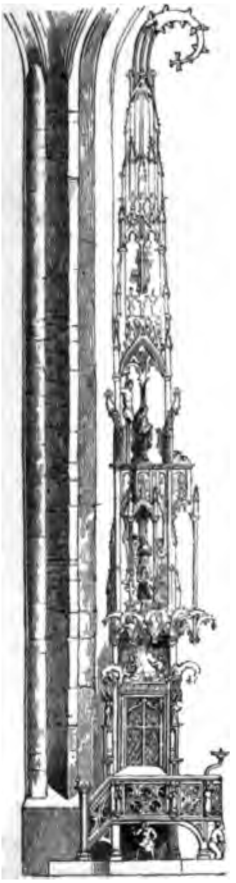
Church Furniture.

The churches of Germany are not generally rich in architectural furniture. Few rood-lofts are found spanning from pillar to pillar of the choir like that at the Madelaine of Troyes (Woodcut No. 435);

and though some of the screens that separate the choirs of the churches are rich, they are seldom of good design. The two at Naumberg are perhaps as good as any of their class in Germany. Generally they were used as the *lectorium*—virtually the pulpit—of the churches. In most instances, however, the detached pulpit in the nave was substituted for these, and there are numerous examples of richly-carved pulpits, but none of beautiful design. In most instances they are overloaded with ornament, and many of them disfigured with quirks and quibbles, and all the vagaries of later German art.

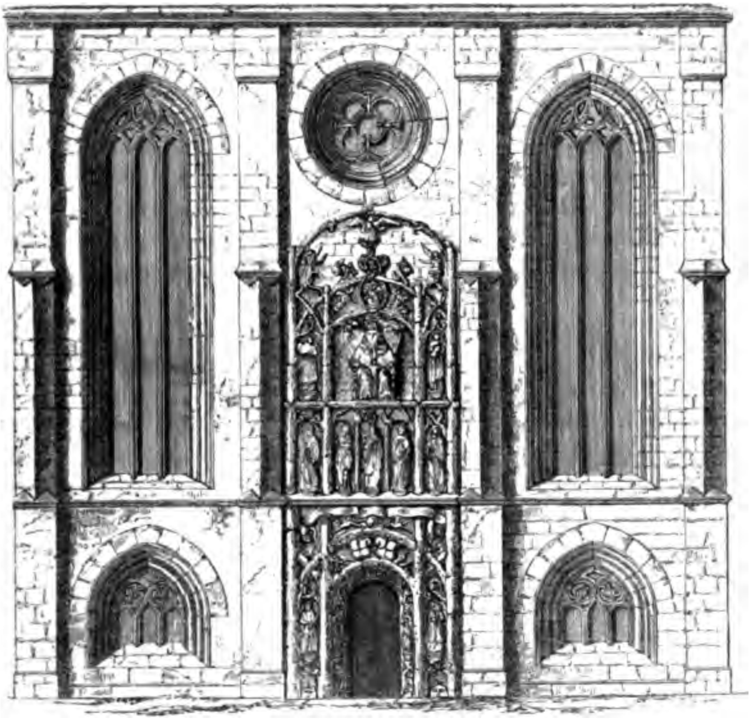
The fonts are seldom good or deserving of attention, and the original altars have almost all been removed, either from having fallen to decay, or to make way for some more favourite arrangement of modern times.

The "Sacraments Hauslein" (the receptacle for the sacred elements of the Communion) is a peculiar article of furniture frequently found in German churches, and in some of those of Belgium, though very rare in France and unknown in England, but on which the German artists seem to have lavished more pains than on almost any other article of church decoration. Those in St. Lawrence's Church at Nuremberg and at Ulm are perhaps the most extraordinary pieces of elaborate architecture ever executed in stone, and have always been looked on by the Germans as chefs-d'œuvre of art. Had they been able, they would have delighted in introducing the same extravagances into external art: fortunately the elements forced them to confine them to their interiors. Nothing, however, can show more clearly what was the tendency of their art, and to what they aspired, than these singular erections, which, notwithstanding their absurdity, considering their materials, must excite our wonder, like the concentric balls of the Chinese. To some extent also they claim our admiration for the lightness and the elegance of their structure. Simplicity is not the characteristic of the German mind. A difficulty conquered is what it glories in, and patient toil is not a means only, but an end, and its expression often excites in Germany more admiration than either loftier or purer art.



527. Sacraments Hauslein at Nuremberg. (From Chapuy.)

It can scarcely be doubted but that much of the extravagance which we find in later German architecture arose from the reaction of the glass-painters on the builders. When first painted glass was extensively introduced, the figures were grouped or separated by architectural details, such as niches or canopies, copied literally from the stone ornaments of the building itself. Before long, however, the painter, in Germany at least, spurned at being tied down to copy such mechanical and constructive exigencies; he attenuated his columns, bent and twisted his pinnacles, drew out his canopies, and soon invented for himself an architecture bearing the same relation to the stone Gothic around him that the architecture shown on the paintings of Pompeii bears to the temples and buildings from which it is derived. In Germany, painters and builders alike were striving after lightness, but in this the painter was enabled by his material easily to outstrip the mason. The essentially stone character of architecture was soon lost sight of. With the painter, the finials, the crockets, and the foliage of the capitals again became copies of leaves, instead of the conventional representations of nature which they are and must be in all true art. Like Sir James Hall in modern times, the speculative mind in Germany was not long, when advanced thus far, in



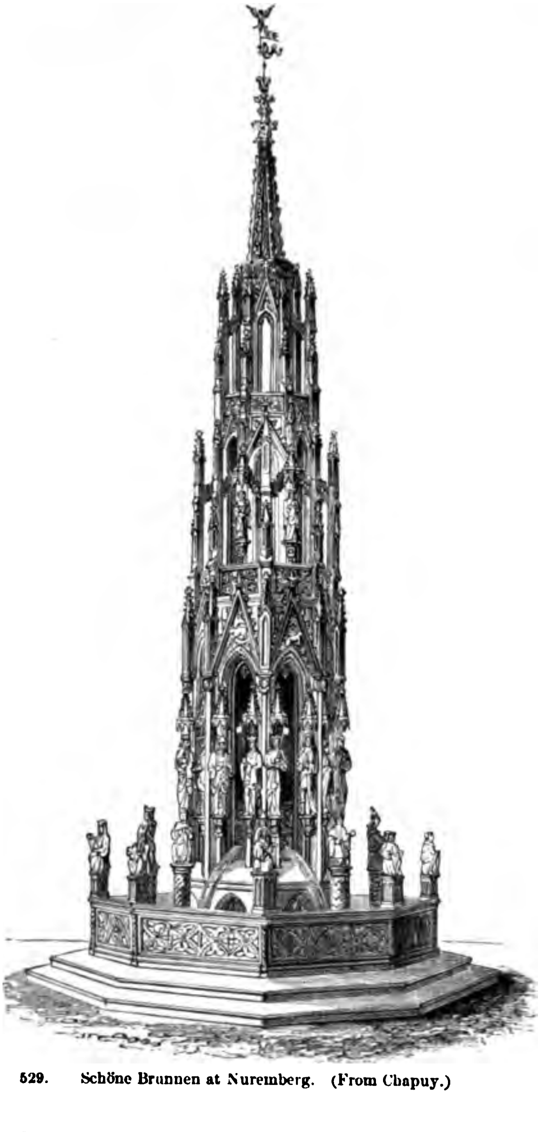
528. Doorway of Church at Chemnitz.

suggesting a vegetable theory for the whole art. All these steps are easily to be traced in the sequence of German painted glass still preserved to us. The more extravagant and intricate the design, the more it was admired by the Germans. It was, therefore, only natural that the masons should strive after the same standard, and should try to realise in stone the ideas which the painters had so successfully started on the plain surface of the glass. The difficulty of the task was an incentive. Almost all the absurdities of the later styles may be traced more or less to this source, and were it worth while, or were this the place, it would be easy to trace the gradual decay of true art from this cause. One example, taken from a church at Chemnitz (Woodcut No. 528), must suffice, where what was usual, perhaps admissible, in glass, is represented in stone as literally as is conceivable. When art came to this, its revival was impossible among a people with whom such absurdities could be admired, as their frequency proves to have been the case. What a fall does all this show in that people who invented the old Round-Gothic style of the Rhenish and Lombard churches, which still excite our admiration, as much from the simple majesty of their details as from the imposing grandeur of their whole design!

CIVIL ARCHITECTURE.

If the Germans failed in adapting the pointed style of architecture to the simple forms and purposes of ecclesiastical buildings, they were still less likely to be successful when dealing with the more complicated arrangements of civil buildings. It is seldom difficult to impart a certain amount of architectural character and magnificence to a single hall, especially when the dimensions are considerable, the materials good, and a certain amount of decoration admitted; but in grouping together as a whole a number of small apartments, to be applied to various uses, it requires great judgment to ensure that every part shall express its own purpose, and good taste to prevent the whole degenerating into a mere collection of disjointed fragments. These qualities the Germans of that age did not possess. Moreover, there seems to have been singularly little demand for civil edifices in the 13th and 14th centuries. It is probable that the free cities were not organised to the same extent as in Belgium, or had not the same amount of manufacturing industry that gave rise to the erection of the great halls in that country; for, with the exception of the Kauf Haus at Mayence, no example has come down to our days that can be said to be remarkable for architectural design. Even this no longer exists, having been pulled down in 1812. It was but a small building, 125 ft. in length by 92 in width at one end, and 75 at the other. It was built in the best time of German pointed architecture, and was a pleasing specimen of its class. At Cologne there is a sort of Guildhall, the Gurzenich, and a tower-like fragment of a town-hall, both built in the best age of architecture; and in some of the other Rhenish towns there are fragments of art more or less beautiful according to the age of their details, but none that will bear comparison with the Belgian edifices of the same class.

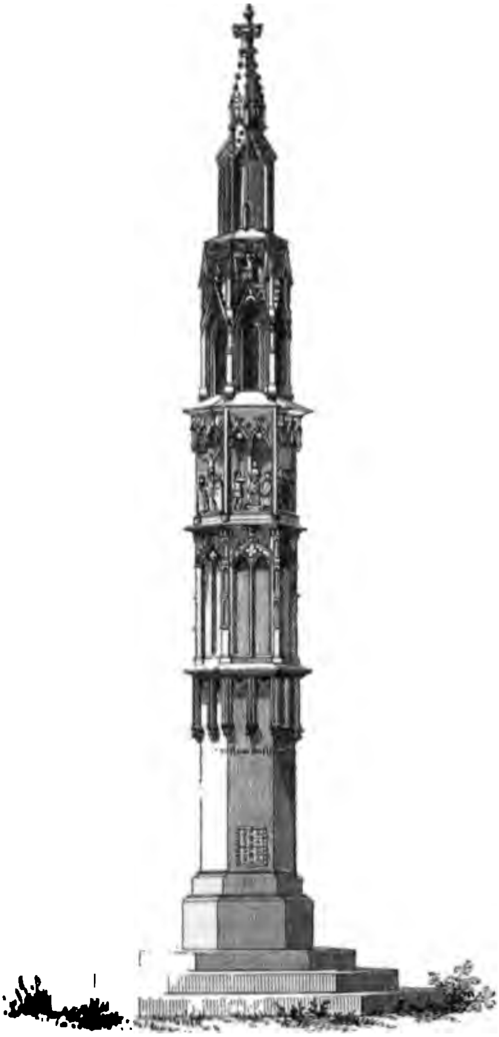
Some of the castles in which the feudal aristocracy of the day resided are certainly fine and picturesque buildings, but they are seldom remarkable for architectural beauty either of design or detail. The same remarks apply to the domestic residences. Many of the old high-gabled houses in the streets are most elaborately ornamented, and produce picturesque combinations in themselves and with one another; but as works of art, few have any claims to notice, and neither in form nor detail are they worthy of admiration.


529. Schöne Brunnen at Nuremberg. (From Chapuy.)

Among more miscellaneous monuments may be named the weigh-tower at Andernach, with its immense crane, showing how any object may be made architectural if designed with taste. The Schöne Brunnen, or "Beautiful Fountains," in the market-place at Nuremberg, is one of the most unexceptionable pieces of German design in existence. It much resembles the contemporary crosses erected by our Edward I. to the memory of his beloved queen

Eleanor, but it is larger and taller, the sculpture better, and better disposed, and the whole design perhaps unrivalled among monuments of its class. The lightness of the upper part and the breadth of the basin at its base gave an appearance of stability which contributes greatly to its effect.

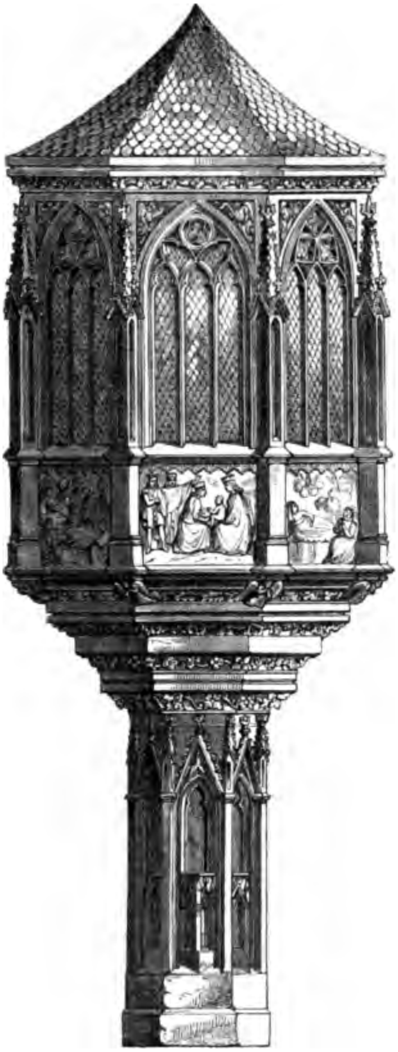
Scarcely less elegant than this is the cross or "Todtenleuchter," Lanterne des Morts, in the cemetery of Kloster Neuberg, near Vienna. Its height is about 30 ft.; the date engraved upon it is 1381. There is a small door at a height of about 5 ft. from the ground, and near the summit a chamber with six glazed windows, in which the light was exhibited.



830. Todtenleuchter at Kloster Neuberg.

In France, some ten or twelve of these lanterns have recently been brought to light and described. In Germany about as many, besides numberless little niches in which lamps were placed in churches, showing a prevalence in Christian countries of a custom which now only prevails among Mahometans, of placing lights at night in the tombs of saints, or of relatives, so long as their memory is preserved. Perhaps, however, the greatest point of interest attached to their investigation arises from the light these foreign examples may be expected to throw on the origin of the Round Towers in Ireland. Their form is not unlike this at Kloster Neuberg. Their destination seems the same, though the dimensions of the Irish towers are greatly in excess of any similar monuments found on the continent of Europe.[1]

In the town of Nuremberg are several houses presenting very elegant specimens of art in their details, though few that now at least afford examples of complete designs worthy of attention. The two parsonages or residences attached to the churches of St. Sebald and



631. Bay Window from St. Sebald, Nuremberg.

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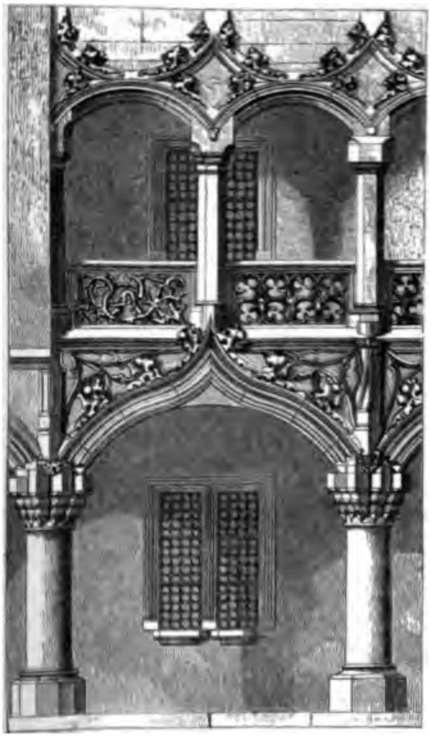
[1] Mr. Hodder Westropp was, I believe, the first to suggest this identity of the Round Towers with these "Fanals," or Lanternes des Mortes. It seems to be the most plausible suggestion yet made, though far from meeting the whole difficulty.

St. Lawrence are among the best. The bay window (Woodcut No. 531) from the façade of the former is as pleasing a feature as is to be found of its class in any part of Germany.

A more characteristic specimen, however, is to be seen at Bruck on the Mur, in Styria, where there still exists a large house, the front of which is ornamented with a verandah in several bays, one of which is represented in the annexed woodcut No. 532. It is in two storeys, the upper containing twice the number of openings of the lower. The whole design is singularly elegant, but betrays the lateness of the date (1505) in every detail; and, more than this, exhibits those peculiarly German features which are so characteristic of the later Gothic in that country. In the lower storey, for instance, the ogee arch instead of being filled up with a decorative piece of construction, is made circular by a plain piece of stone, which completes the construction but violates the decoration. Above this we have a balustrade in stone, imitating wood in a manner the Germans were so fond of, but which is certainly wrong in principle as it is in taste; but, notwithstanding these defects, we cannot but regret that more examples of the same class have not come down to our time.


532. Façade of House at Bruck-am-Mur.

It is true that in all countries the specimens of domestic art are, from obvious causes, more liable to alteration and destruction than works of a more monumental class. Making every allowance for this, Germany still seems more deficient than its neighbouring countries in domestic architecture in the pointed style, and one can hardly escape the conviction that this form was never thoroughly adopted by the people of this country, and that it therefore, never having had much hold on their feelings or taste, died out early, leaving only some wonderful specimens of masonic skill in the more monumental buildings, but very few evidences of true art or of sound knowledge of the true principles of architectural effect.

CHAPTER VII.

NORTHERN GERMANY.

BRICK ARCHITECTURE.

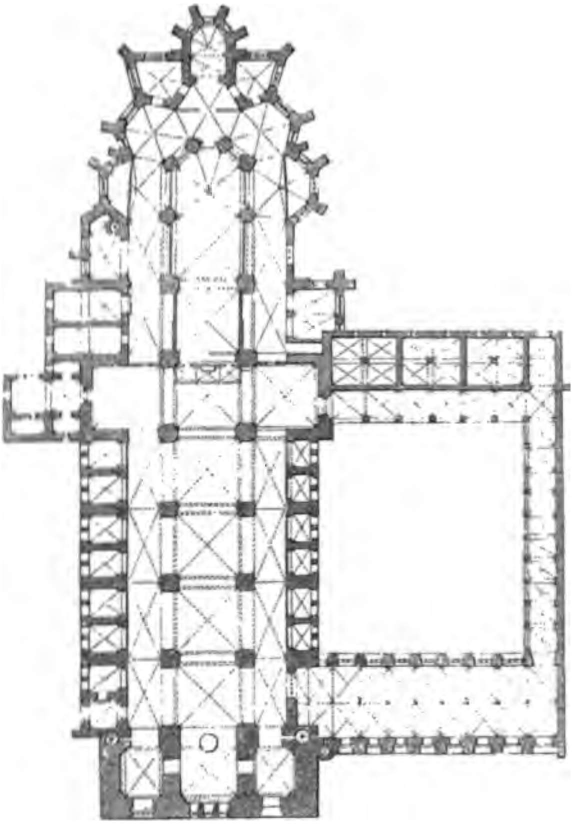
CONTENTS.

Churches at Lubeck — in Brandenburg — in Ermenland — Castle at Marienburg — Town-hall at Brunswick.

Along the whole of the southern shores of the Baltic extends a vast series of sandy plains, now composing the greater part of the kingdom of Prussia, with Hanover and Mecklenburg and the duchies of Brandenburg and Brunswick. This district was to a considerable extent cultivated during the Middle Ages, and contained several cities of great commercial and political importance, which still retain many of their ecclesiastical and civil buildings.

These plains are almost wholly destitute of any stone suitable for building purposes, and brick has alone been employed in the erection not only of their houses but of their churches and most monumental buildings. This circumstance has induced such a variation in the character of the architecture as to justify the North of Germany being treated as a separate province. The differences which are apparent may also be owing to some extent to ethnographic differences of race, though it is not easy to say how much may be owing to this cause. In early Christian times the whole province was inhabited by the Wends, a race of Sclavonic stock; they have been superseded by the Teutonic races and their language has disappeared, but their blood must still remain, and a knowledge of this fact would at once account to an ethnologist for the absence of art. A Teutonic race, based on a Celtic substratum, would have wrought beauty out of bricks, and the constructive difficulties would not have prevented the development of the art. But a Teutonic formation overlying a Sclavonic base is about as unfortunate a combination for architectural development as can well be conceived. This, added to the deficiency of appropriate building materials, will more than suffice to account for the phenomena we meet with on the southern shores of the Baltic.

It is true that in the hands of a refined and art-loving people like the inhabitants of the North of Italy, brick architecture may be made to possess a considerable amount of beauty. Burnt clay may be moulded into shapes as elegant, and as artistic, as can be carved in stone; and the various colours which it is easy to impart to bricks may be used to form mosaics of the most beautiful patterns; but to carry out all this with success requires a genuine love of art, and an energy in the prosecution of it, which will not easily be satisfied. Without this the facilities of brick architecture are such that it can be executed by the commonest workmen, and is best done in the least artistic forms. While this is the case, it requires a very strong feeling for art to induce any one to bestow thought where it is not needed, and to interrupt construction to seek for forms of beauty. In brick architecture, the best walls are those with the fewest breaks and projections, so that if relief and shadow are to be obtained, they must be added for their own sake; and more than this, walls may be built so thin that they must always appear weak as compared with stone walls, and depth of relief becomes almost impossible.

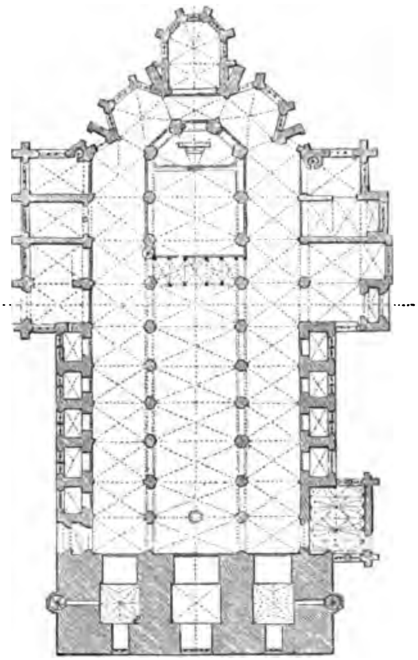


834 Plan of Cathedral, Lubeck. (From Schlösser and Tischbein, 'Denkmäle Lubeck.') Scale 100 ft. to 1 in.

Another defect is, that a brick building almost inevitably suggests a plaster finishing internally; and every one knows how easy it is to repeat by casting the same ornaments over and over again, and to apply such ornaments anywhere and in any way without the least reference to construction or propriety.

All these temptations may of course be avoided. They were so at Granada by the Saracens, who loved art for its own sake. They were to a considerable extent avoided in the valley of the Po, though by a people far less essentially art-loving than the Moors. But it will easily be supposed that this taste and perception of beauty exerted very little influence in the valley of the Elbe. There the public buildings were raised as cheaply as the necessities of construction would allow, and ornaments were applied only to the extent absolutely requisite to save them from meanness. Thus the churches represent in size the wealth and population of the cities, and were built in the style of Gothic architecture which prevailed at the time of their erection; but it is in vain to look in them for any of the beauties of the stone Gothic buildings of the same period.

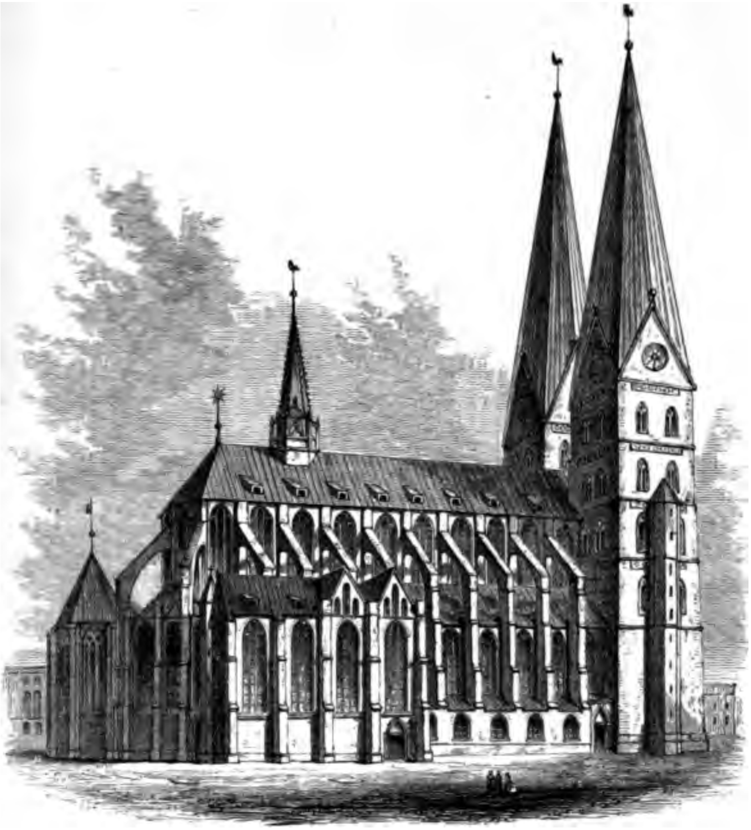
The principal group of churches in the district is found at Lubeck, which was perhaps, in the Middle Ages, the wealthiest town on the shores of the Baltic. The largest of these is the Dom Kirche or Cathedral (Woodcut No. 533), a building 427 ft. long over all. The nave is 120 ft. wide externally. The vaults of the three aisles spring from the same height, the central one being 70 ft. high, those of the side-aisles a little less. This, with the wide spacing of the piers, gives a poor and bare look to the interior. The choir is better, showing a certain amount of variety about the chevet; but even this is leaner than in any stone building, and displays all the poverty so characteristic of the style.



534. Plan of Church of St. Mary, Lubeck. Scale 100 ft. to 1 in.

The Maria Kirche is a more favourable specimen of its class, though not so large. It is of a somewhat earlier age, and is built more in accordance with the principles of Gothic design. The central aisle is 130 ft. high; the side-aisles only half as much. This allows space for a very splendid clerestory, which, if filled with stained glass, would redeem the flatness of the mouldings and the general poverty of the architecture of the interior.

The church of St. Catherine is smaller than either of these, though of about the same age as that last mentioned, and of as good a design. It possesses the somewhat curious peculiarity of having a double choir one above the other like that of St. Gereon at Cologne (Woodcut No. 505), but more complete and extensive than in that example. The whole of the lower choir is vaulted over, and a second, at a height of 20 ft., forms an upper choir over its whole extent.



535. View of Church of St. Mary, Lubeck. (From Schlösser and Tischbein.)

There are several smaller churches in Lubeck, none of which show any peculiarities not found in the larger. The same faults which characterise the interior of these churches are also found in the exterior. The Maria Kirche (Woodcut No. 535) is the best of them in this respect, but though its outline is good, it is far from being a pleasing specimen of architecture. Its two western towers are of the form typical in Lubeck. They are just 400 English ft. in height, and with these dimensions ought to be imposing objects, but they certainly are not so, being in fact as bad specimens as could be of Gothic towers.

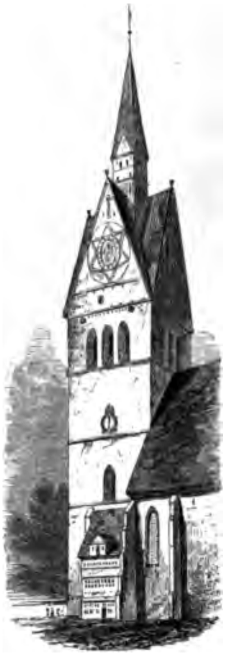
As usual in Germany, there is no door at the west end of any of these churches, and the principal entrances are in all cases lateral; one of those attached to the cathedral is an elaborate and beautiful piece of stone architecture, but it is the only one apparently that is at all remarkable.

Some of the rood-screens are covered with carving, and the tabernacles, or receptacles for the holy elements, are, as in most parts of Germany, elaborately ornamented. They are nearly of the same age and of the same style as those at Nuremberg, one of which is represented in Woodcut No. 527.

Dantzic possesses several large churches very similar, both in style and arrangement, to those of Lubeck. The principal of these is the cathedral, or Marien Kirche, commenced in its present form in 1343, and completed in the year 1502. It is 316 feet long and 105 in width, with a transept extending to 206 feet. The whole area of the church is about 42,000 ft., so that though not among the largest, it may still be considered as a first-class church; and, being of a good age, it is as effective in design as any of the brick churches of the province. It has one tower at the west end 230 ft. in height.

The church of St. Catherine is in part older than the cathedral, having been founded in 1185, though it was to a great extent rebuilt at a subsequent period. Its dimensions as it now stands are 210 ft. long, and 120 ft. wide over all. Neither it nor any of the other churches of the town seem to have any remarkable feature of design or construction worthy of being alluded to.

The town of Luneberg retains not only its public buildings, but its street architecture, nearly as left from the Middle Ages; and its quaint gables and strange towers and spires give it a character that is picturesque and interesting, but cannot be said to be beautiful. Nor is there anything in its architecture that is worthy either of admiration or imitation.

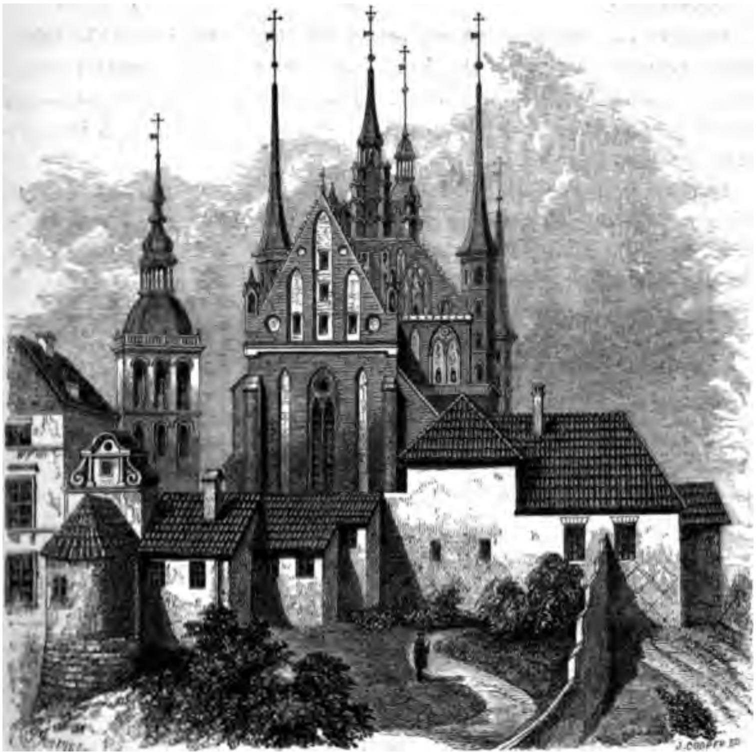


536. Tower in the Kœblinger Strasse, Hanover.

The form of church tower found there, and indeed generally in the district, is a modification of that at Paderborn (Woodcut No. 471), and is well exemplified by that in the Kœblinger Strasse at Hanover

Woodcut No. 536). It is an honest and purpose-like piece of architecture, but certainly without any pretensions to beauty of design.

Further east in Ermenland, as Eastern Prussia used to be called, there are many brick buildings, which from their picturesqueness and the appropriateness of their form half disarm the critic. Among these, for instance, such a church as that of Frauenburg (Woodcut No. 537), with its light graceful spires and its brick tracery in its gables, is an object, if not of grandeur, at least of considerable beauty in itself, and in this instance is grouped with so many others as to form a more picturesque combination than is usually to be met with on the shores of the Baltic. The church itself is 300 ft. long by 80 in width, and has three aisles in the nave, of equal height but unequal width. Its worst defect is the plainness and bulk of the octagonal piers which support the vault.



537. Church at Frauenburg. (From Quast, 'Denkmäler der Baukunst in Ermenland.')

The next illustration, of the church at Santoppen (Woodcut No. 538) is of a type infinitely more common in Ermenland. In Quast's work[1] are some dozen churches varying only slightly from this in design, but in many the western tower is more like a many-storeyed warehouse than a building designed either for ornament or any church-like use. They all, however, possess some character and charm from their novelty, being very unlike anything found elsewhere.

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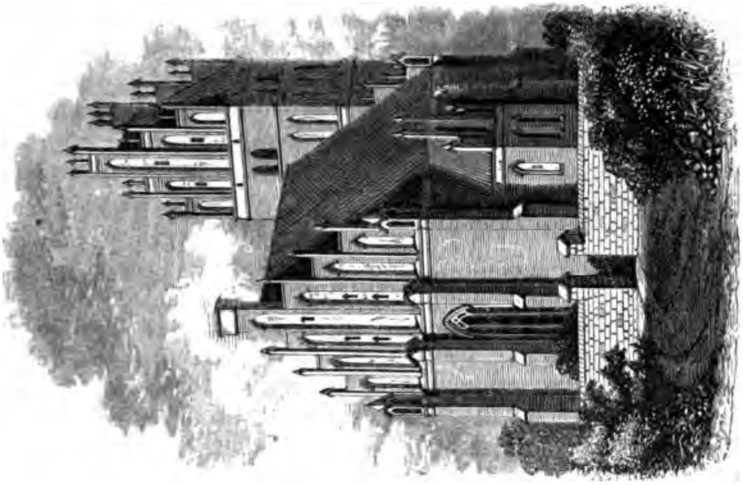
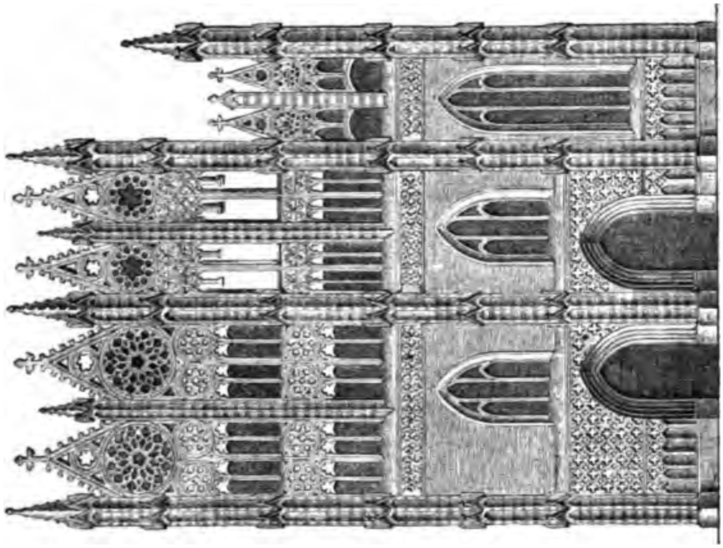
[1] 'Denkmäler der Baukunst in Ermenland.' Berlin.

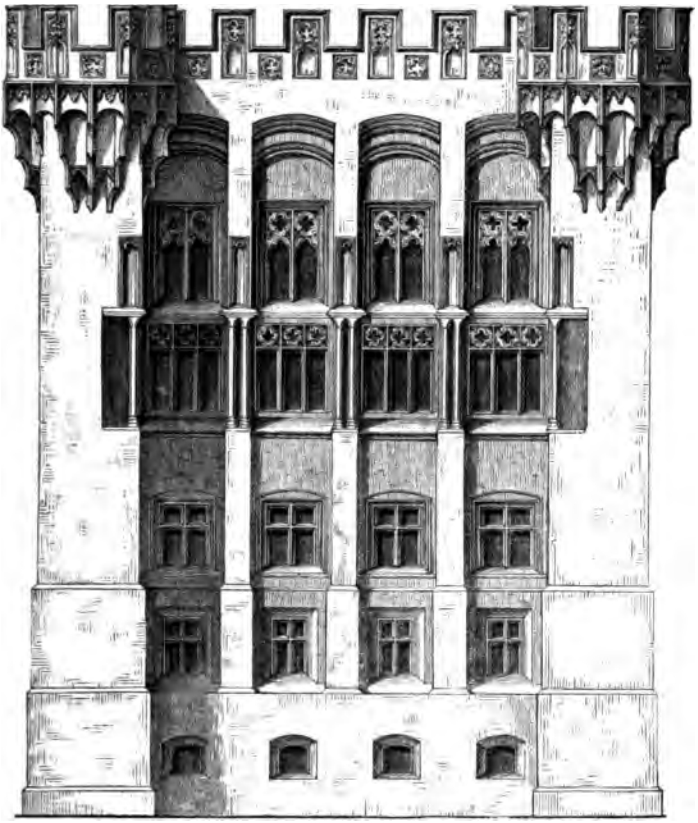


538. View of Church at Santoppen. (From Quast.)



539. Façade of Marien Kirche, Brandenburg. (From Rosengarten.)

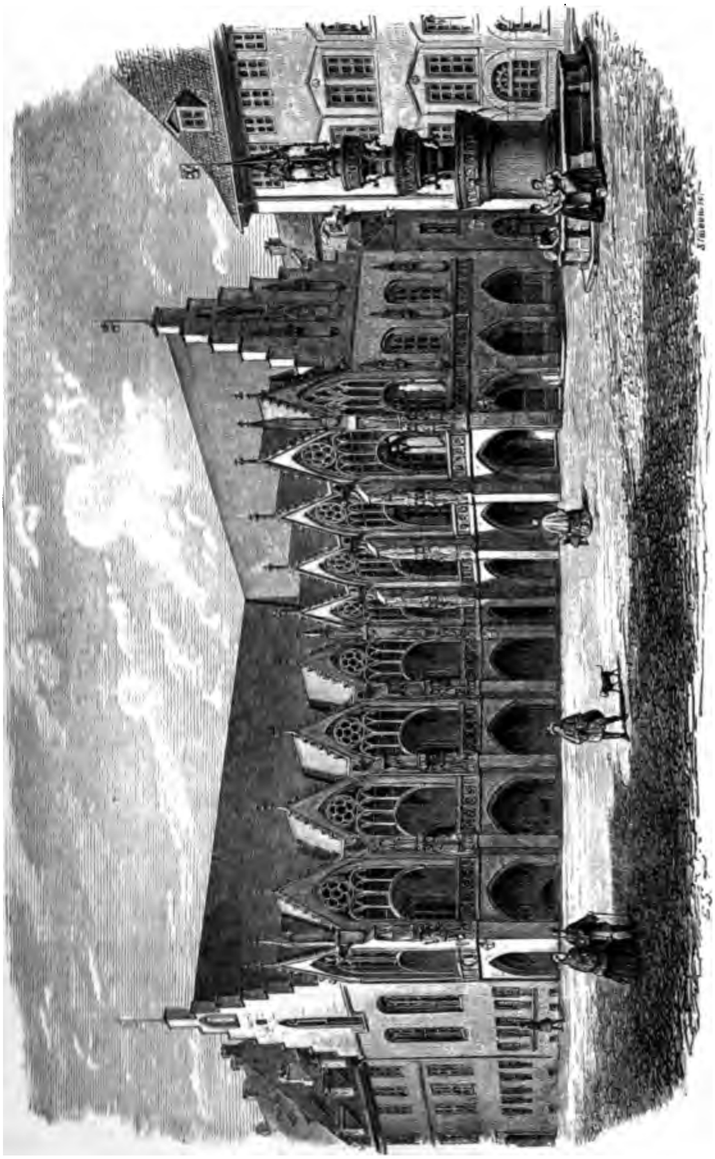
The Marien Church at Brandenburg (Woodcut No. 539) exhibits this style carried to an excess which renders it almost bizarre. The lower part is unobjectionable, the ornament around the doors and under the windows being appropriate and well placed; but the windows themselves more space had been wanted for addressing people in the platz, the omission of the central mullion would have sufficed. Notwithstanding this, it is a picturesque and appropriate building, more so than any other known out of the Flandrian province. The fountain, too, on the right hand of the cut, is a pleasing specimen of its class; a little heavier at the base than quite comports with the style, though that is a fault quite on the right side.



540. Façade of the Knight-hall in the Castle of Marienburg. (From Rosengarten.)

As the examples just enumerated are types of the best buildings which exist in the province, they are sufficient to characterise the style, and at the same time unfortunately to show how little real beauty it has as a form of architecture. As many of the towns were populous and wealthy during the Middle Ages, they of course had large and commodious churches; but, as happened in Holland, they have as little artistic merit as it is possible that a church should have which is built in imitation of a French pointed-arched cathedral, and with the dimensions which these churches possess.

The same is true of their civic buildings: some are large and richly ornamented, but are all deficient in grace, and in that exquisite balance between construction and ornament—usefulness combined with beauty—which are invariably shown in the buildings farther south.



541. Town-hall at Brunswick. (From Rosengarten.)

BOOK V.

CHAPTER I.

SCANDINAVIA.

CONTENTS.

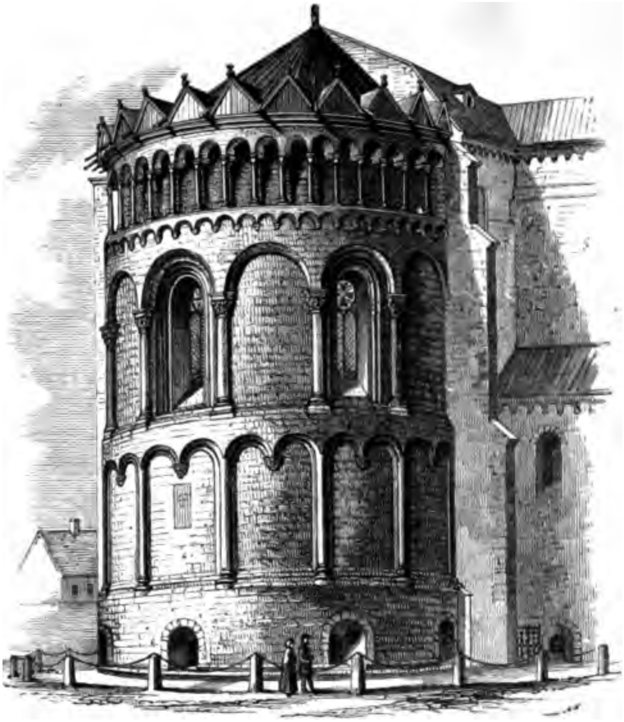
Sweden — Norway — Denmark — Gothland — Round Churches—Wooden Churches.

No one who has listened to all that was said and written in Germany before the late war about "Schleswig-Holstein Stamm verwandt," can very well doubt that when he passes the Eyder going northward, he will enter on a new architectural province. He must, however, be singularly deficient in ethnographical knowledge if he expects to find anything either original or beautiful in a country inhabited by races of such purely Aryan stock. If there is any Finnish or Lap blood in the veins of the Swedes or Danes it must have dried up very early, for no trace of its effect can be detected in any of their architectural utterances; unless, indeed, we should ascribe to it that peculiar fondness for circular forms which is so characteristic of their early churches, and which may have been derived from the circular mounds and stone circles which were in use in Sweden till the end of the 10th century. The country in fact was only converted to Christianity in the reign of Olaf—Skol Konung—1001 to 1026; and then, and for a long time afterwards, was too poor and too thinly inhabited to require any architectural buildings, and when these came to be erected the dominant race was one that never showed any real sympathy for the art in any part of the world.

Sweden.

The largest and most important monument in the province is the Cathedral of Upsala, though it can hardly be quoted as an example of Scandinavian art; for when the Swedes, in the end of the 13th century (1278), determined on the erection of a cathedral worthy of their country, they employed a Frenchman of the name of Etienne

Bonneuil, to furnish them with a design, and to superintend its erection. This he did till his death, though how far the work was advanced at that time there is now no means of knowing. The church is only 330 ft. in extreme length by 145 in width, with two western towers and the principal portal between them. The whole is of brick, except the doorways and some smaller ornamental details. The building was in progress during 200 years, and after Bonneuil's death the French principles of detail were departed from; and, in addition to this, the upper parts of the western towers were rebuilt during the last century, and other disfigurements have taken place, so that the building would hardly be deemed worthy of a visit farther south, and is only remarkable here from the meanness of its rivals.



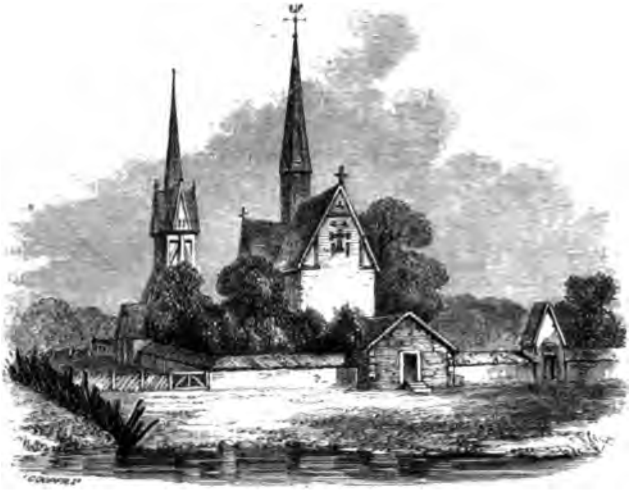
512. Apse of Lund Cathedral. (From Marryat, 'One Year in Sweden.')

The church at Lidkoping (1260–1500) ranks next in importance to that of Upsala. It has, however, no western towers or other ornaments externally, and internally is arranged without that knowledge of architectural effect which alone could render it interesting.

The cathedral at Lund is both older and better than either of these. It was commenced apparently about the year 1080, and considerably advanced in 1150, and the erection of the apse must be placed between these two dates. It is the only unaltered part of the church, and is a very beautiful specimen of the German style of that date. The little gables over the apsidal gallery seem part of the original design, and are the only examples of the class we possess. With these the whole makes up a very pleasing composition.

There are other churches in Sweden, at Westeroas, Stregnas and Abo, all large—viz., about 300 ft. east and west by 100 to 120 in width,—and founded in the 12th and 13th centuries; but, like the nave at Lund, they have been altered and improved so frequently during the last 600 years, that very little remains of the original design: whatever that may have been, in their present state they are hardly worthy of mention.

Perhaps the most pleasing objects in Sweden are the country churches, with their tall wooden spires and detached belfries. If these do not possess much architectural beauty, they at all events are real purposelike erections, expressing what they are intended for in the simplest manner, and with their accompaniments always making up a pleasing group.

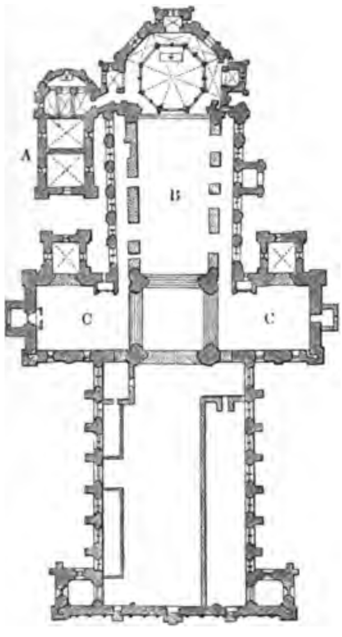


543. Old Country Church and Belfry. (From Marryat, 'One Year in Sweden.')

NORWAY.

The Norwegians are more fortunate than either the Danes or Swedes in possessing at Trondhjem a national cathedral of great beauty and interest, even in its present ruined state.

Its history is easily made out from a comparison of local traditions with the style of the building itself. Between the years 1016 and 1030 St. Olaf built a church on the spot where now stands St. Clement's church, the detached building on the north, shown in plan at A (Woodcut No. 544). He was buried a little to the south of his own church, where the high altar of the cathedral is now situated. Between the years 1036 and 1047, Magnus the Good raised a small wooden chapel over St. Olaf's grave; and soon afterwards Harald Haardraade built a stone church, dedicated to Our Lady, immediately to the westward of this, at B. This group of three churches stood in this state during the troubled period that ensued. With the return of peace in 1160, Archbishop Eysteen commenced the great transept C C to the westward of the Lady Chapel, and probably completed it about the year 1183. At that time either he or his successor rebuilt the church of St. Clement as we now find it. During the next sixty or seventy years the whole of the eastern part of the cathedral was rebuilt, the tomb-house or shrine being joined on to the apse of the Lady Church, as was explained in speaking of the origin of the French chevet (vol. i. p. 475). In 1248 Archbishop Sigurd commenced the nave, but whether it was ever completed or not is by no means certain. In 1328 the church was damaged by fire, and it must have been after this accident that the internal range of columns in the circular part was rebuilt in the style of our earlier Edwards.

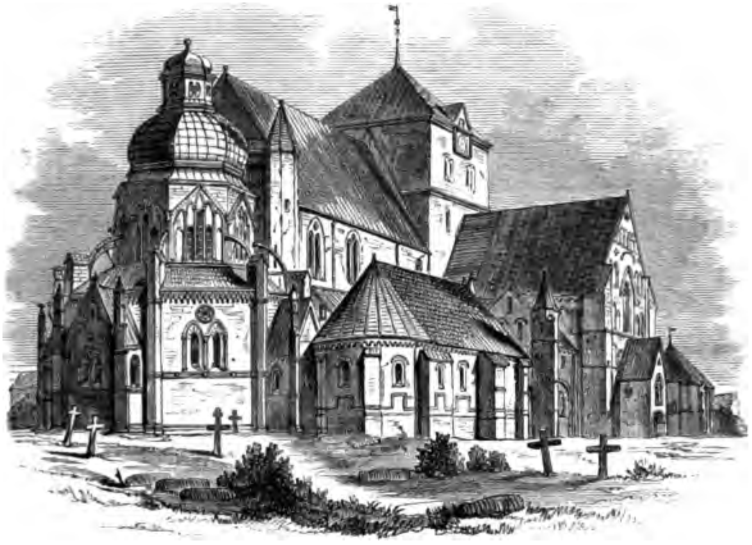


544. Plan of Cathedral of Trondhjem. Scale 100 ft. to 1 in.

Thus completed, the church was one of the largest in Scandinavia, being 350 ft. long internally; the choir 64, and the nave 84 ft. wide. But its great merit lies more in its details than in its dimensions. Nothing can exceed the richness with which the billet-moulding is used in the great transept. Its employment here is so vigorous and so artistic, that it might almost be suspected that this was its native place, and that it was derived from some wooden architecture usual in this country before being translated into stone.

The greatest glory of the place is the tomb-house at the east end. Externally this presents a bold style of architecture resembling the early English.[1] Internally it is a dome 30 ft. in diameter, supported on a range of columns disposed octagonally, and all the details correspond with those of the best period of decorated architecture.

As will be observed from the plan (Woodcut No. 544), the architect had considerable difficulty with all these rebuildings to bring the old and new parts to fit well together, and in consequence the walls are seldom straight or parallel with one another, and, what is most unusual, the choir expands towards the east. This is not, however, carried to such an extent as to be a blemish, and with a double range of columns down the centre would hardly be perceived, or if perceived, the effect would be rather pleasing than otherwise.



545. View of Cathedral of Trondhjem.

Had the western front been completed, it would have been one of the most beautiful anywhere to be found, not only from its extent (120 ft.), but also from the richness and beauty of its details, belonging to the very best period of art—about the year 1300. In design and detail it resembles very much the beautiful façade of Wells Cathedral. Like the rest of the cathedral, it is now in a very ruinous state, and, as will be seen by the view (Woodcut No. 545), the whole is so deformed externally by modern additions, that its original effect can only be judged of by a careful examination of its details.

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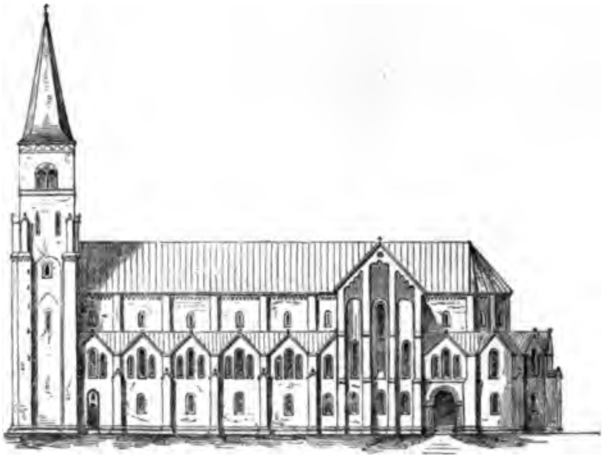
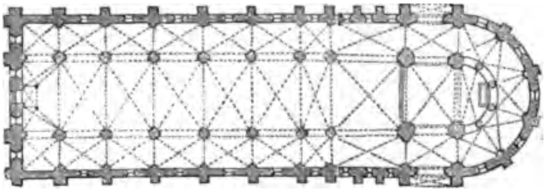
[1] Both in design and purpose this circular part of Trondhjem Cathedral is an exact counterpart of Becket's Crown at Canterbury. That was erected as a baptistery and burial-place for the archbishops, and seems to have been afterwards incorporated in the cathedral, *more Francorum*.

DENMARK.

The most interesting church in Denmark is that at Roeskilde, in Jutland, which is now the burial-place of the kings, and the principal cathedral of the country. The original church was founded in the year 1081, and was then apparently circular, and of the same dimensions as the east end of the present edifice. This latter was commenced after the middle of the 12th century, and does not seem to have been completed as we now see it till towards the end of the 13th. The east end is probably one-half of the old round church rebuilt, the required enlargement of space having been obtained by a considerable extension of length towards the west.



546. Elevation of Roeskilde Domkirche. (From Steen Friis.) Scale 100 ft. to 1 in.

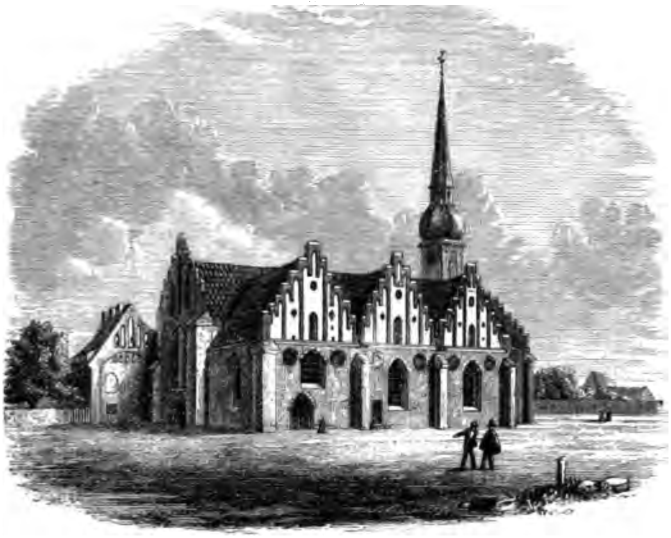


547. Plan of Church at Roeskilde. (From Steen Friis.) Scale 100 ft. to 1 in.

Its general dimensions, as shown in the plan (Woodcut No. 547), are 265 ft. long by 75 in breadth internally. The whole area is only about 24,000 ft., and consequently not more than half that of most English cathedrals.

From the elevation (Woodcut No. 546), it appears simple and elegant in its design, and contains the germ of much that is found afterwards in the churches of the neighbourhood, especially in the range of small gables along the side of the aisles, marking externally each bay of the nave.[1] This arrangement is almost universal in the North of Germany, but seldom, if ever, found in France or England.

At Aarhuus is a somewhat similar church, commenced about the year 1200, but rather larger, being 300 ft. in length by 80 in breadth. In its present state, however, it is only a very ugly and uninteresting brick building in an indifferent state of repair. The Frue Kirche, in the same town, is a far more pleasing specimen of art, and is a fine example of the style prevalent on the southern shores of the Baltic, from which province the design is evidently borrowed. Like every specimen of honest art, it is pleasing; but neither its form nor arrangement will bear any very close analysis.



548. Frue Kirche, Aarhuus. (From Marryat's 'Jutland and the Danish Isles.')

The cathedral at Ribe, on the northern limits of Schleswig, has an apse something like that of Lund Cathedral, but of slightly more modern date, and wanting the gallery under the roof. Still it is only a bad copy in brick of what is so frequently found on the Rhine in stone.

Sometimes, however, we do get a touch of originality even in this province, as in the church of Kallundborg (Woodcut No. 549), built in the form of a cross, with one square tower in the centre, and four octagonal towers, one at the end of each of the arms of the cross transept. Was it a caprice? or is it borrowed from any other form? Except in the Kremlin at Moscow, I do not know where to look for any such type, and even then the likeness is very remote. A larger octagon in the centre, with four square towers around it, must have been a happier arrangement, and, if properly subordinated, have formed a picturesque group. In this example the church itself is lost sight of, and the towers are not remarkable for beauty.

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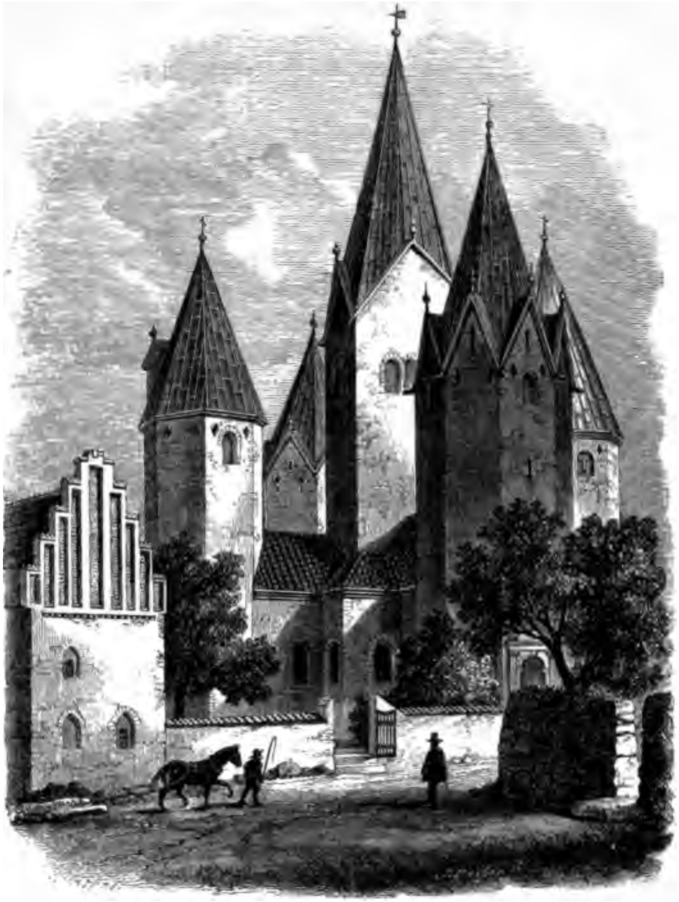
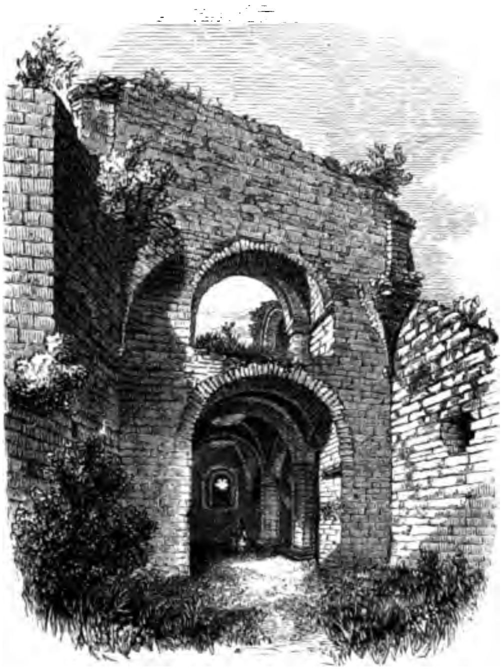
[1] The plan and elevation are taken from a description of the church by Steen Friis, published at Copenhagen, 1851. In both cuts the modern additions are omitted.



549. Church of Kallundborg. (From Marryat's 'Jutland and the Danish Isles.')

GOTHLAND.

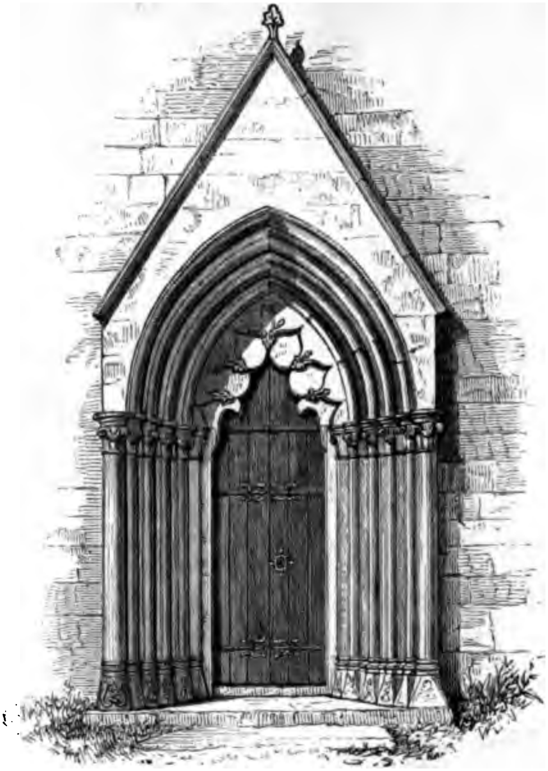
The island of Gothland, though politically attached to Sweden, deserves to be treated as a little province of its own in an architectural view, inasmuch as it possesses a group of churches within its limits as interesting as any in the North of Europe; and peculiar, if not exceptional in design. Their existence is owing to the fact, that during the 11th and 12th centuries a great portion of the Eastern trade which had previously been carried on through Egypt or Constantinople was diverted to a northern line of communication, owing principally to the disturbed state of the East, which preceded and in fact gave rise to the Crusades. At this time a very considerable trade passed through Russia, and centered in Novogorod. From that place it passed down the Baltic to Gothland, which was chosen apparently for the security of its island position, and its capital, Wisby, became the great emporium of the West. After two centuries of prosperity, it was gradually superseded by the rise of the Hanseatic towns on the mainland, and a final blow was struck by Valdemar of Denmark, who took the town by storm in 1361. Since then it has gradually become depopulated. The consequence has been that, no additional accommodation being required, the old churches have remained unaltered; still they have not been pulled down nor their materials used for secular purposes. Even now Wisby, the capital, is said to retain eighteen churches belonging to the period of its prosperity; the whole island containing twice or three times that number.



550. Holy Anders Church, Wisby. (From Marryat's 'One Year in Sweden.')

The cathedral was originally founded about the year 1100, burnt down in 1175, and rebuilt as we now find it about 1225. Like all the others it is small, being only 180 ft. long by 80 in width. It is the only church now used for divine service, the remainder being in ruins.

One of the most remarkable churches in Wisby is that of the Holy Anders, founded originally, it is said, in 1046. It is one of those double or two-storeyed churches so common in some parts of Germany, but which in this instance displays peculiarities not found elsewhere.



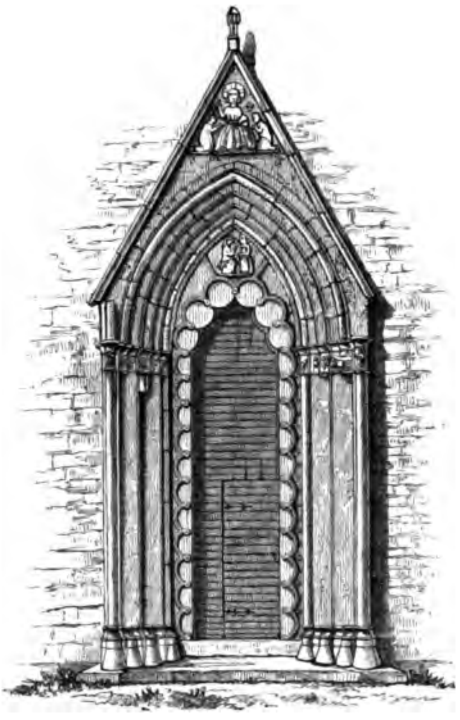
551. Portal, Sandeo Church, Gothland. (From Marryat's 'One Year in Sweden.')

The nave is an octagon about 52 ft. east and west. A square space in the centre is bounded by four stout pillars, between which the vault of the lower storey is omitted, so as to leave an opening into the upper storey. Four pillars of slender design support the vault of the upper church, and the whole, with the roof, rises to about 100 ft. To the eastward is a choir, externally a rectangle, 32 ft. by 25, but internally semicircular at the eastern end.

The church most like this in Germany is perhaps that at Schwartz Rheindorf (Woodcuts Nos. 483 and 484). It also resembles the chapel at Landsberg (Woodcut No. 485); but the most extended and indeed the typical example of a church of this class is St. Gereon's at Cologne (Woodcuts Nos. 505 and 506).

The churches of St. Lawrence and St. Drothens both belong probably to the 11th century. That of St. Nicholas must be as late as the 13th, probably the end of it, and the others range between these two dates, forming in themselves what is rarely met with — a complete and unaltered series of examples of the style.

The most striking peculiarity of the Gothland churches is the constant appearance of the pointed arch at a date earlier than we find it as a decorative feature in other parts of Europe. It may be, however, that the instances where it is found are additions or alterations of a later date; but the evidence is at least strong enough to merit most careful examination. It is by no means improbable that in a city where coins of the Chalifs are constantly found, the pointed arch may have been introduced from the East at an earlier date than the Crusades, which seem to have suggested its employment in France.


552. Portal, Gerum Church, Gothland. (From Marryat's 'One Year in Sweden.')

The earliest church known to exist in Gothland, still bearing the distinctive name of Stenkyrka, was erected 1032. The great building epoch of the island is comprised in the 100 years that succeeded that event.[1] Yet during this period we find such examples as the Portal of Sandeo church (Woodcut No. 551) confidently dated as belonging to the year 1058, or the one from Gerum church (Woodcut No. 552) dated eight years earlier! Whatever their date, they are singularly elegant specimens of the art, and worthy of being quoted, if for that reason alone.

Even if we hesitate to admit the antiquity of these examples, it seems difficult to refuse the evidence of such an interior as that of Folö Church (Woodcut No. 553). There is nothing in the character of the pillars to render doubtful their belonging to the year 1096, to which they are assigned. They may be taller than similar examples would be in our country; but we are now treating of a country where

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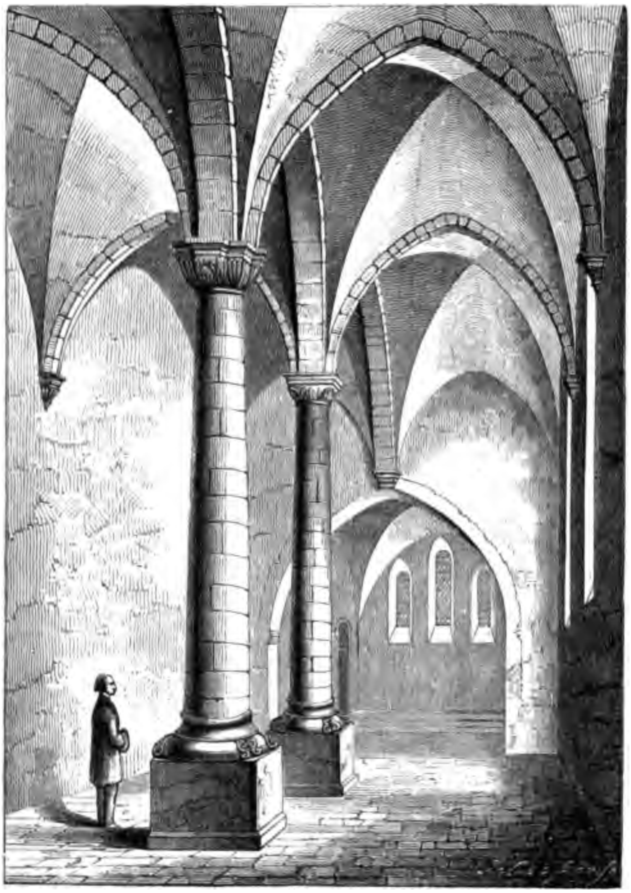
[1] See Marryat's 'One Year in Sweden' (Murray, 1862), from whom most of these particulars are borrowed.



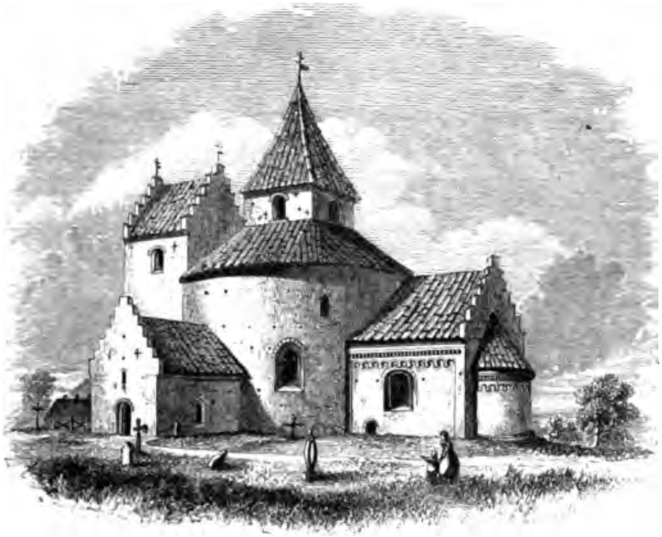
553. Folö Church, Gothland. (From Marryat's 'One Year in Sweden.')

wood was a more common building material than stone, and where consequently slenderer forms might be expected. There seems as little reason to doubt that the pointed arches which they support are part of the original design. If these examples should prove really to be of the date assigned to them, we must remodel our chronology of the pointed arch in Europe to a considerable extent. Before doing so, however, it would be important that they should be investigated with more care than has hitherto been bestowed upon them, and by some thoroughly competent archæologist.

Another peculiarity seems to be that the Gothland churches are all small buildings, like the Greek churches. There does not appear to have been any metropolitan basilica, or any great conventual establishment, but an immense number of detached cells and chapels scattered in groups all over the island, with very few that could contain a congregation of any extent. Till, however, they are investigated with care, and drawn, it is impossible to say whether this arose from any affinity to the Greek Church, or from some local peculiarity which we do not now understand.

Round Churches.

To the archæologist the Round Churches form the most interesting group in the Scandinavian province, though to the architect they can hardly be deemed of much importance. They are, however, so remarkable that many theories have been formed to account for their peculiarities. The most general opinion seems to be that the circular form was adopted for defensive purposes. The position of their apses, however, their large windows near the ground, and the unprotected position of their doors as originally constructed, all militate against this idea; besides that a square form was as easily defensible, in the age when they were erected, as a circular one.

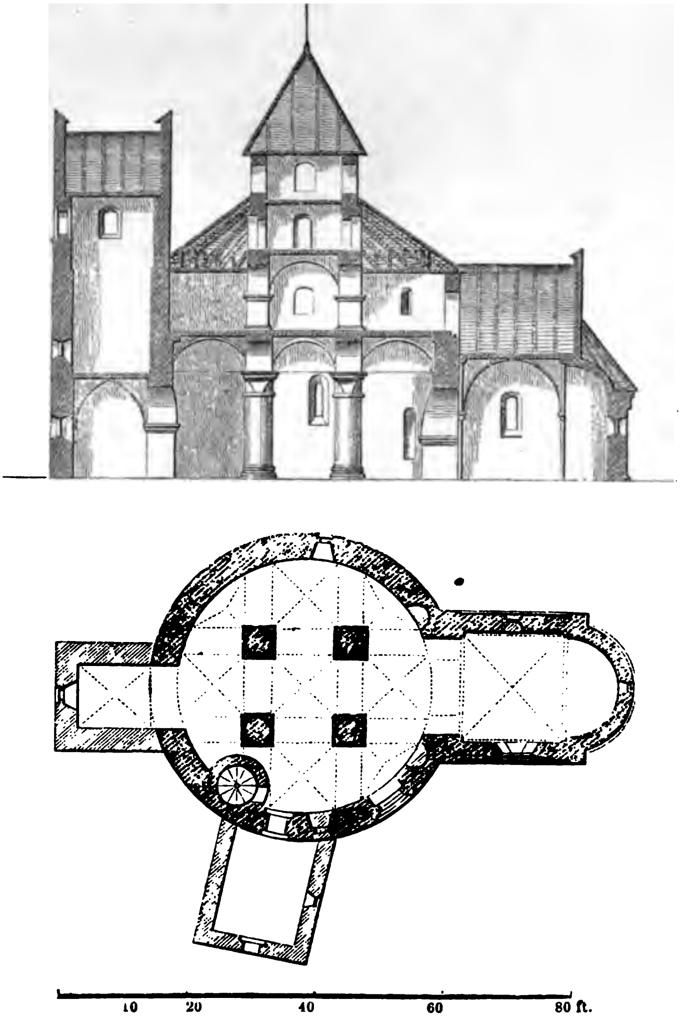


654. Round Church, Thorsager. (From Marryat's 'Jutland and the Danish Isles.')

A more probable suggestion is that the people when first converted to Christianity clung to the circular form, as the sacred one which they had been accustomed to reverence in the tombs of their ancestors.

Such, for instance, were the three mounds said to cover the remains of Woden, Thor, and Freya, which were worshipped at Gamla Upsala, down to the conversion of the country in the 11th century.

The probability seems to be that they are the lineal descendants of



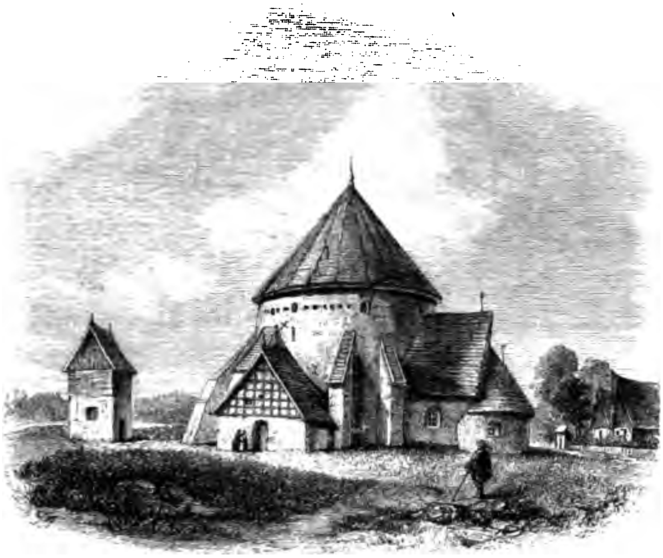
555. Section and Ground-plan of Round Church, Thorsager. (From Marryat's 'Jutland and the Danish Isles.')

those circles of stones—half tomb, half temple—which are known as spread over this country from Stonehenge to Stennis, and which are equally common throughout the Scandinavian province.

It probably also was the case that the circular form of church was much more common in Northern Europe in the early centuries of the

Christian faith than afterwards. In the richer and more populous South they were superseded, as has above been pointed out, by basilicas of more extended dimensions, into which they were frequently absorbed. In the poorer North they have sufficed for the scant population and remained unchanged.

Mr. Marryat enumerates eight examples in Denmark,[1] and there are at least as many, if not more, in Sweden. All are of the Teutonic type—naves with small apses—as contradistinguished from the French or Celtic form, where the circular part became the choir to which the nave was added afterwards.



556. Round Church of Oster Lars, Bornholm. (From Marryat's 'Jutland and the Danish Isles.')

That at Thorsager, in Jutland, though not one of the oldest, may be taken as a type of its class, and its arrangement and appearance will be understood from the annexed plan, section, and view (Woodcuts Nos. 554 and 555). The building is not large; the diameter of the circle internally being only 40 ft., and the floor encumbered by four great pillars; the total length over all is 90 ft. Originally it seems to have been intended as a two-storeyed church, the vault being omitted over the central compartment, as was the case in the Holy Anders Church at Wisby (Woodcut No. 550). This circumstance would account for its peculiarities much more satisfactorily than the theory that it was fortified, of which no trace appears in its general ordinance. The whole design is certainly pleasing and picturesque, though there is a little awkwardness in the way the various parts are fitted together.

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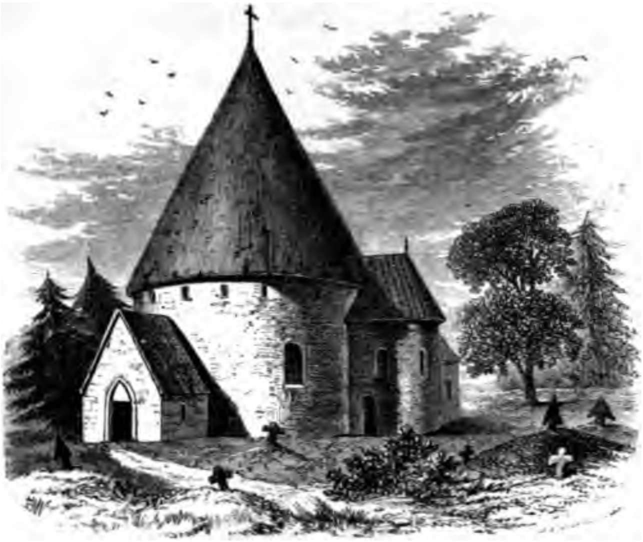
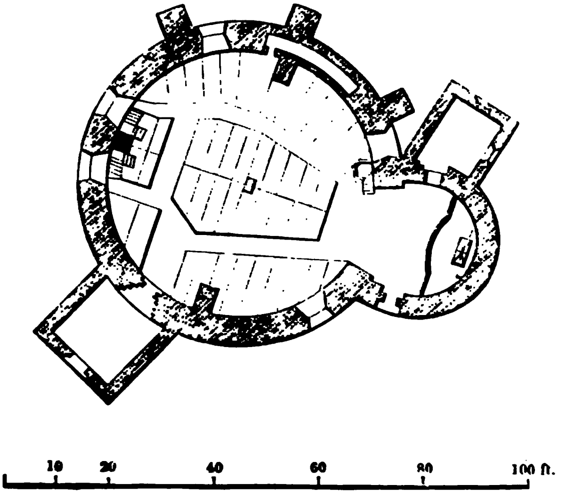
[1] Two in Zealand—Storehedinge and Biernede; one in Funen—Horne, at Faaborg; one in Jutland—Thorsager; and four in Bornholm—Oster Lars, Nykers, Ols, and Ny.—Vol. ii. p. 49.



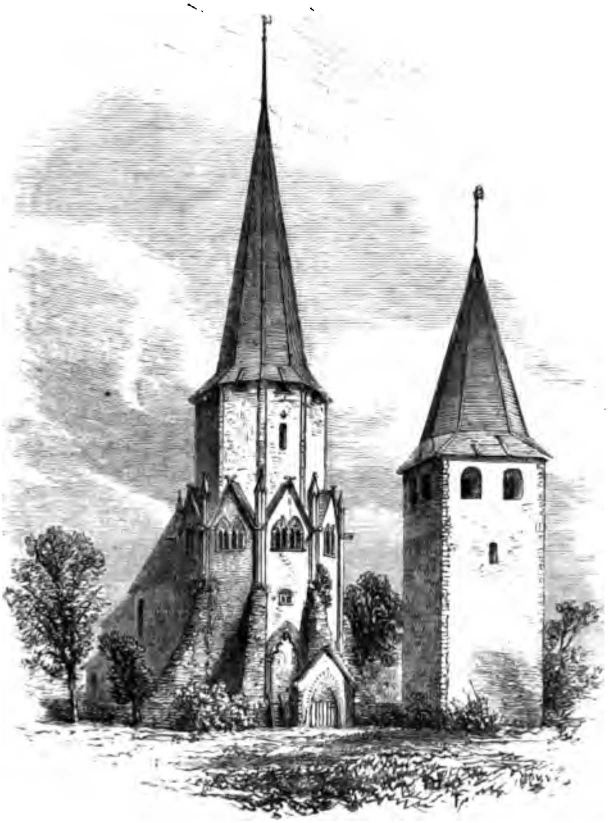
557. View of Hagby Church, Gothland. (From Marryat's 'One Year in Sweden.')



558. Plan of Hagby Church. (From Marryat's 'One Year in Sweden.')

The Round Church at Oster Lars, in Bornholm (Woodcut No. 556), is of exactly the same type as that at Thorsager, but older, and having more the appearance of being fortified than the other: there being a range of small openings immediately under the roof. These, however, are singularly ill-suited for defensive purposes—as war was understood when the church was built—and look much more like the rudiments of an apsidal gallery, as seen at Lund, and so commonly introduced on the Rhine shortly after this period.

In Gothland there are several examples of round churches, the most typical being that at Hagby (Woodcut No. 557); though it is not so picturesque as the two last quoted, it differs in reality very little from them, showing a permanence and consistency of type throughout the whole province where they are found; the only changes being such as arise from its being more modern, and the four pillars being omitted from the interior. So slight indeed are the differences that it is hardly worth while to point them out, more especially as they are not in themselves objects of much beauty; nor were they afterwards developed in the country where they are found into forms possessing much architectural significance.

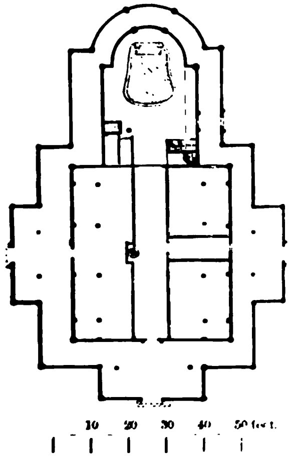


559. Läderbro Church and Wapenhus, Gothland. (From Marryat's 'One Year in Sweden.')

So great a favourite was this form, however, that it clung to the soil long after its meaning was lost, and we find it stretched into a tall octagonal spire in Läderbro Church, but still serving as a nave to a small choir, the foundation of which is said to date as far back as 1086. The octagon as we now see it certainly belongs to the 13th or 14th century. Something of the same feeling may have led to the peculiar arrangement of Kallundborg Church (Woodcut No. 549). There four octagonal naves lead to as many choirs joined together in the centre. If we had more knowledge, perhaps we could trace the affiliation of all these forms, and complete a little genealogy of the race.

Wooden Churches.

Curious as these circular edifices certainly are, there is a group of wooden churches still existing in Norway which are as peculiar to the province and as interesting to the antiquary at least, if not to the architect, as anything found within its limits. They are not large, and, as might be expected from the nature of the materials with which they are constructed, they are fast disappearing, and in a few years not many probably will remain; but if we may judge from such accounts as we have, they were at one time numerous, and indeed appear to have been the usual and common form of church in that country. Everywhere we read of the wooden churches of Saxon and Norman times in our country, and of the contemporary periods on the Continent; but these have almost all been either destroyed by fire or pulled down to make way for more solid and durable erections. That at Little Greenstead in Essex is almost the only specimen now remaining in this country.

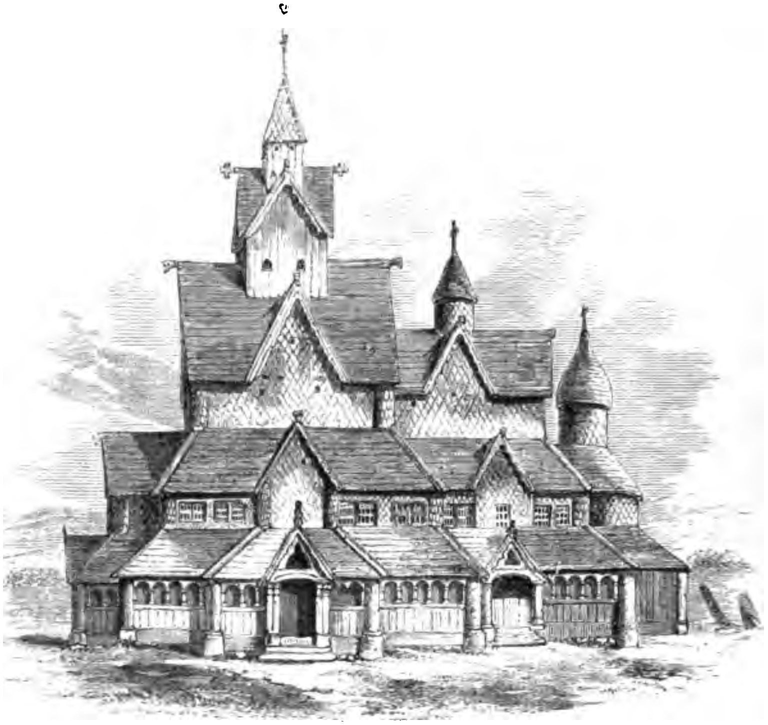


560. Plan of Church at Hitterdal.

The largest of those now to be found in Norway is that of Hitterdal. It is 84 ft. long by 57 across. Its plan is that usual in churches of the age, except that it has a gallery all round on the outside. Its external appearance (Woodcut No. 561) is very remarkable, and very unlike anything in stone architecture. It is more like a Chinese pagoda, or some strange creation of the South Sea islanders, than the sober production of the same people who built the bold and massive round Gothic edifices of the same age.

Another of these churches, that at Burgund, is smaller, but even more fantastic in its design, and with strange carved pinnacles at its angles, which give it a very Chinese aspect.

That at Urnes is both more sober and better than either of these, but much smaller, being only 24 ft. wide by 65 ft. from east to west. As may be seen from the view (Woodcut No. 562), it still retains a good deal of the Runic carving that once probably adorned all the panels of the exterior, as well as the various parts of the roof. As these decayed they seem to have been replaced by plain timbers, which of course detract very much from the original appearance.



561. View of the Church at Hitterdal. (From Dahl's 'Holtz Baukunst in Norwegen.')

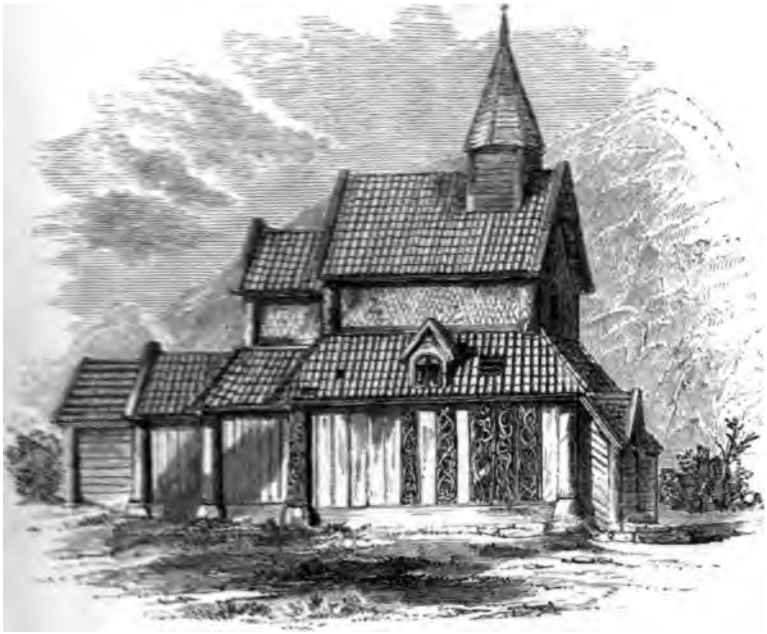
All the doorways and principal openings are carved with the same elaborate ornaments, representing entwined dragons fighting and biting each other, intermixed occasionally with foliage and figures.

This style of carving is found on crosses and tombstones, not only in Scandinavia, but in Scotland and Ireland. It is only known to exist in its original form on wood in these singular churches.

There can be no doubt about the age of these curious edifices, for not only does this dragon-tracery fix them to the 11th or 12th century, but the capitals of the pillars and general character of the mouldings exactly correspond with the details of our own Norman architecture, so far as the difference of materials permits.

With the circular churches, and those at Wisby, these wooden churches certainly add a curious and interesting chapter to the history of Christian architecture at the early period to which they belong, and are well deserving more attention than they have received.

When our knowledge of the examples is more complete, we may perhaps be able to trace some curious analogies from even so frail a style of architecture as that of wood. Something very like these Norwegian churches is found in various parts of Russia. The mosques and other buildings erected in Cashmere and Thibet of the Deodar pinewood are curiously like them. The same forms are found in China and Burmah, and much of the stone architecture of these countries is derived directly from such a wooden architecture as this. It may perhaps only be, that wherever men of cognate race strive to attain a given well-defined object with the same materials, they arrive inevitably at similar results. If this should prove to be the case, such a uniformity of style, arising without intercommunication among people so differently situated, would be quite as curious and instructive as if we could trace the steps by which the invention was carried from land to land, and could show that the similarity was produced by one nation adopting it from another, which all research has hitherto failed to prove was in reality the case.



362. Church of Urnes, Norway.

BOOK VI.

CHAPTER I.

INTRODUCTORY.

ENGLAND.

It is perhaps not too much to assert that during the Middle Ages Architecture was practised in England with even greater success than among any of the contemporary nations. In beauty of detail and elegance of proportion the English cathedrals generally surpass their Continental rivals. It is only in dimensions and mechanical construction that they are sometimes inferior. So lovingly did the people of this country adhere to the Art, that the Gothic forms clung to the soil long after they had been superseded on the Continent by the classical Renaissance; and the English returned to their old love long before other nations had got over their contempt for the rude barbarism of their ancestors. It is now more than a century since Horace Walpole conceived the idea of reproducing the beauties of York Minster and Westminster Abbey in a lath-and-plaster villa at Strawberry Hill. The attempt, as we now know, was ridiculous enough; but the result on the Arts of the country most important. From that day to this, Gothic villas, Gothic lodges, and Gothic churches have been the fashion—at first timidly, and wonderfully misunderstood, but now the rage, and with an almost perfect power of imitation. The result of this revived feeling for Mediæval art which interests us most in this place is, that every Gothic building in the country has been carefully examined and its peculiarities noticed. All the more important examples have been drawn and published, their dates and histories ascertained as far as possible, and the whole subject rendered complete and intelligible. The only difficulty that remains is, that the works in which the illustrations of English art are contained range over 70 or 80 years—the early ones published before the subject was properly understood; and that they are in all shapes and sizes, from the most ponderous folios to the most diminutive of duodecimos. Their number too is legion, and they therefore often go over the same ground. The one book that now seems wanted to complete the series of publications on the subject is a clear and concise, but complete, narrative of the rise and progress of the style, with just a sufficient amount of illustration to render it intelligible. Two volumes in 8vo., of 500 pages each, might suffice for the distillation of all that is contained in the 1001 volumes above alluded to; and with 1000 illustrations, if well selected, the forms and peculiarities of the style might be rendered sufficiently clear. But less would certainly not suffice.

Under these circumstances, it will be easily understood that nothing of the sort can be attempted in this work. With only one-tenth of the requisite space available, and less than that proportion of illustration, all that can be proposed is to sketch the great leading features of the subject, to estimate the value of the practice of the English architects as compared with those on the Continent, and to point out the differences which arose between their methods and ours, in consequence of either the local or social peculiarities of the various nationalities.

This compression is hardly to be regretted in the present instance, since any one may with very little trouble master the main features of the history in some of the many popular works which have been published on the subject, and all have access to the buildings themselves. It need hardly be added, that these are far better and truer exponents of the feelings and aspirations of those who erected them than all the books that ever were written. Unless a man learns to read the lessons these stone books so vividly convey, by an earnest personal investigation of the monuments themselves, of one style at least, he will hardly ever be able to understand the subject; but for the purpose of such a study, the English Mediæval architecture is perhaps the most complete and perfect. Nowhere else can all the gradations of change be so easily traced; and in no other style was there so little interference from extraneous causes. Throughout, the English sought only to erect the building then most suitable to its destination, with the best materials available for the purpose; and the result is therefore generally more satisfactory and more harmonious than in other countries where the architects were more tramelled by precedents, or more influenced by local peculiarities.

CHRONOLOGY.

		Years' duration.	Name of style.
Departure of Romans	400	300	Megalithic.—Stone Rude Monuments.
Arthur	480 to 542		
To establishment of Heptarchy	700		
To Conquest	..	366	Early round-arched, or Saxon style.
William I.	1066	109	Round-arched style, Norman.
William II.	1087		
Henry I.	1100		
Stephen	1135		
Henry II.	1154		
Henry II.	1175	97	Early pointed Lancet, or Plantagenet style.
Richard I.	1189		
John	1199		
Henry III.	1216		
Edward I.	1272	105	Perfected pointed Decorated, or Edwardian style.
Edward II.	1307		
Edward III.	1326		
Richard II.	1377		
Henry IV.	1329	108	Late pointed Perpendicular, or, Lancastrian style.
Henry V.	1412		
Henry VI.	1422		
Edward IV.	1460		
Edward V.	1483		
Richard III.	1483		
Henry VII.	1485	117	Fan-vaulted Transitional, or Tudor style.
Henry VIII.	1509		
Edward VI.	1546		
Mary	1553		
Elizabeth	1557		
To	1602		

After the departure of the Romans, the various tribes that inhabited the island were left so feebly organised, and so unequally balanced, that they could find no better occupation for their time than that of cutting each other's throats; in which they were afterwards so ably seconded by the Saxons and Danes, that it is in vain to look for any development of the arts of peace among them. They were equal to the erection of a Stonehenge or an Avebury in honour of those who fell in the struggles against their foreign invaders; but beyond this their architectural aspirations do not seem to have reached.

With the establishment of the Heptarchy, and more especially after Alfred's glorious reign, we might expect something better. The country was then converted to Christianity. Churches were wanted; and there were Italian priests to be found who could tell the inhabitants what was being done at Rome and elsewhere on the Continent. But against this we have the knowledge that the dominant race was Saxon or Danish—Aryan *pur sang*—and art had consequently no place in their affections. Their churches were probably small and rude, just sufficient for their purposes, and no more; and designed, like railway stations, to last only till increasing accommodation should compel an alteration. Most probably, too, the greater number were built of wood; and for the true Saxon style we ought perhaps to look to the Norwegian wooden churches—described in the last book—as types of the style, rather than to the towers erected, probably, as additions to the original wooden churches. Of these towers, many still remain in our island; but in almost every case the wooden nave has been superseded by one of stone and generally in the pointed-arched style of architecture.

With the Norman Conquest a new state of things was inaugurated. Great tracts of country and great part of the wealth of the conquered races escheated to the Conqueror, and in the division of the spoil the clergy seem to have been even more fortunate than the laity. But however this may have been, it will be easily understood that a French hierarchy vowed to celibacy would be able to find no better way of employing their easily acquired wealth than in the display of architectural magnificence. During the century which succeeded the Conquest, the Saxon cathedrals, with scarcely an exception, were swept away to make room for nobler buildings designed by foreign architects, and all the larger abbey churches were likewise rebuilt. All this was done with such grandeur of conception, and so just an appreciation of the true principles of architectural effect, that even now the Norman nave, in spite of its rudeness, is frequently a more impressive specimen of art than the more polished productions of the succeeding centuries.

The impulse once so nobly given, the good work proceeded steadily but rapidly. During the three centuries which succeeded the Conquest, all the artistic intellect of the nation seems to have been concentrated on this one art. Poetry hardly existed, and Painting and Sculpture were only employed as the handmaids of architecture. But year by year new and improved forms of construction were invented and universally adopted. New mouldings, and new applications of carvings and foliage were introduced; and painting on opaque substances and even on glass was carried to an astonishing degree of perfection. All this was done without borrowing and without extraneous aid, but by steadily progressing to a well-understood object with a definite aim. It is true that occasionally, as at Westminster Abbey, we detect the influence of French arrangements; but even there the design is carried on in so essentially English a manner, with details so purely English, as to make us feel even more strongly how essentially native the style had become.

The Ethnic combination, which led to the marvellous perfection of Gothic art during the Edwardian period, was as fortunate as can well be conceived. It was a Celtic hierarchy and aristocracy steadied by a Saxon people; with the substratum of an earlier Celtic race, held in absolute subjection by the Saxons, but rising again, at least partially, to the surface, under the Norman domination. It was something like what happened in Athens when a Dorian race was superimposed on one of Pelasgic origin; and, although the conditions were here reversed, and the field far more limited, the result was still most successful. Within the limits of a century, the French had jumped from the tentative example of St. Denis (1144) to the perfection of the Sainte Chapelle (1244). Our St. Stephen's Chapel was not finished till a century afterwards; but while the French hardly ever went beyond their great 13th century effort, in the 16th century we were building the Royal Chapels at Windsor, Westminster, and Cambridge.

The French wars and the wars of the Roses seem to have altered the orignal state of affairs to a very considerable extent. The Norman nobility were decimated—almost, indeed destroyed—and another stratum of society came gradually to the surface, but this time certainly not Celtic. On the walls of the churches of the Lancastrian period we read—faintly, it must be confessed—the great Saxon motto, "The greatest possible amount of accommodation at the least possible expenditure of money and thought." During this period, too, the cathedral and conventual hierarchies were yielding before the development of the parochial system. It may be wrong to assert that the Reformation began as early as 1400, but it is true that the seeds were then sown, which afterwards ripened into the explosion of the Commonwealth. Some very grand churches were no doubt erected during the Lancastrian period, and some beautiful additions made to existing edifices; but they were hard and mechanical as compared with that which preceded them. They were the work of accomplished masons, not wrought out with the feelings of educated gentlemen; and, though we may admire, we cannot quite adore even the best and noblest productions of their age.

Under the Tudors the style went out in a blaze of glory. Nothing can be more gorgeous and fascinating than the three Royal Chapels, and the other contemporary fan-roofed buildings; but they are like the fabled dying hues of the dolphin—bright and brilliant, but unnatural and fleeting. It was the last spasmodic effort of an expiring style, and soon passed away.

After the Reformation was complete there was no longer any want of new churches, and the great incentive of making a house worthy of the service of God was taken away; so that during Elizabeth's reign architecture was almost wholly occupied in providing new and more extensive mansions for the nobility and landed gentry. Spacious rooms, well-lighted galleries, comfortable chambers, and good accommodation for servants were the demands of the time, with sufficient stateliness, but at the least possible outlay. Comfort and economy are the inherent antitheses of architectural effect; and then, as now, brought the art down from its exalted pedestal almost to the level of a mere useful art. But the Bodleian Library and other buildings in our Universities show that the art lingered even in the 17th century, and that men still looked upon mullions and pinnacles as objects on which a little money might be advantageously spent. But it was no longer the old art: that was struck down on the battlefield of Towton in 1461, only to be partially galvanised into life at Bosworth, twenty-four years afterwards.

Although Gothic architecture continued to be employed in the Universities and in remote corners of the land long after it had ceased to be practised abroad, it must not therefore be assumed that the people of England generally regarded it with admiration. To them it was the symbol of a superstition from whose influence they gloried in escaping, or the emblem of a feudal tyranny from which they were just emerging into partial freedom. During Elizabeth's reign the struggle was hardly over; the wounds of the combatants were still fresh and bleeding, the anger of the contest had by no means subsided, and they looked with hate and abhorrence on whatever recalled the stern realities of the past. We can now afford to look on the Middle Ages with far different feelings; our wounds have long since been healed, and hardly a scar remains. Time has thrown its veil of poetry over what was then a mere prosaic matter of fact, hiding those features which were once so repulsive, and softening much which even now it is impossible to forget. They shrunk from what they felt as a reality; we cherish it because it has faded into a dream.

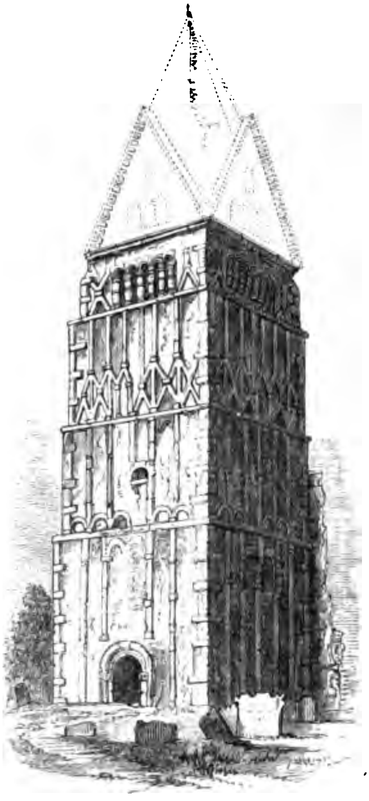
Bearing in mind the prevalence of these feelings, we should not be surprised that so soon as classical art was presented to them the people rushed to it with avidity. The world was then ringing with the praise of the newly disseminated poetry of Virgil, the eloquence of Cicero, and the glorious narratives of Livy. A new light was dawning, and the cry arose on all sides, "Away with the Middle Ages, with their superstition and their tyranny. Roman greatness, Roman literature, and Roman art are to regenerate the world!" We are now convinced that the Classical Renaissance was not successful; but is it quite clear that a Mediæval revival will not prove even a greater and more disastrous mistake?

Be this as it may, in the whole range of artistic history it would be difficult to find any single monograph that might be made so complete in itself, or all the details of which are so well known, as that of Mediæval art in England. We know its birth and parentage; we can follow it through youth to the bloom of manhood. We can admire it in the staid maturity of its power, and in the expiring efforts of its failing strength; and we know the cause of its decay and death. To those who are able to grasp it, no story can be more interesting; while to those who desire to understand what architecture really is, how it can be cultivated so as to insure success, and by what agencies it is sure to decay and finally to die, no subject is capable of being more instructively treated.

CHAPTER II.

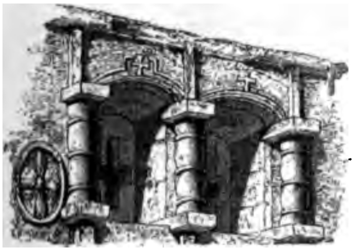
SAXON ARCHITECTURE.

So few and indistinct are the traces of architectural art in England before the Norman Conquest, that for a long time it was a moot point among antiquaries whether or not any such thing existed as true Saxon architecture. The question may now be considered as settled in the affirmative. In his last edition, Rickman enumerates twenty churches in which fragments are found which certainly belong to the pre-Norman period, though no complete example can be pointed to as illustrating the style then prevalent. Since Rickman's death ten or twelve more specimens have been discovered. Generally they are towers or crypts, as St. Winifred's at Ripon, or the pillars of a chancel arch, as at Reculver. Sometimes it is a doorway, at others only a piece of rude walling. On a review of the whole, it is evident that architecture in England was certainly ruder and less developed than that on the Continent at the same age, and differed from it in one curious peculiarity. Both were, of course, based on the Roman art which preceded them; but the Saxon in its ornamentation showed a tendency to wooden forms which we do not find in the others. In Lycia, in India, and Egypt, we are able to trace a wooden architecture gradually developing itself into one of stone; but here we can almost certainly detect a stone architecture becoming wooden from the two materials being constantly employed in juxtaposition, the meaner being generally predominant.



563. Tower of Earl's Barton Church. (From Britton's 'Architectural Antiquities.')

Although interesting to English antiquaries, the specimens of Saxon art are so insignificant as hardly to deserve much notice in a universal history of the art, and one or two examples will suffice to explain the peculiarities of the style. The tower of Earl's Barton in Northamptonshire contains in itself more undoubted Saxon characteristics than any other specimen yet described: its angles, as shown in Woodcut No. 563, are constructed with that peculiar form of quoin known as "long and short," while its faces are ornamented by long pilaster-like slips connected by semicircular arches, or more frequently by straight-lined cross-bracing very wooden in its character. The windows (Woodcut No. 564) are formed by gouty balusters, looking very much as if they were of wood turned in a lathe, and the whole arrangements bear out that character. Even more characteristic of the style than this, is the doorway under the tower of the church at Monkwearmouth in Durham (Woodcut No. 565). There seems no doubt but that it is part of the church which Benedict Biscop erected there in the 7th century. According to the chronicles, when he was enabled by the liberality of King Ecgfrid to found a monastery there, he went, in 674, to Gaul to procure masons who could erect it in the "Roman manner," meaning evidently thereby, in stone instead of wood, for anything more unlike Roman art than that can hardly be imagined, and, as he visited Rome several times, he must have known what the art really was. The upper part of the pillars here is evidently copied from turned posts in wood, and except the arch there are few traces of Roman influence in the design. The twined serpents with birds' beaks, on the right doorpost, are, as we know from manuscripts of that age, singularly characteristic of the style, but not, so far as I know, found elsewhere engraved in stone on a church door. Though quaint and interesting to the antiquary, it must be confessed there is neither grace nor beauty in any feature of the style, nor an approach to grandeur of dimensions in any example which has been spared to the present day.


564. Windows, Earl's Barton. (From Britton.)

Had any great conventual church or cathedral survived we might perhaps be forced to modify this opinion; but the only one of which we know anything is that which was erected at Canterbury by Archbishop Odo in the years 940–960, to replace the older church of St. Augustine.[1] Even this, however, we only know from the description of Edmer, the singer, who saw it before it was destroyed by fire in 1067. Like the German churches of that age, it seems to have had two apses. The principal one, towards the east, was appropriated to the clergy; while the western one belonged to the laity, or, as we should now say, was devoted to parochial purposes.

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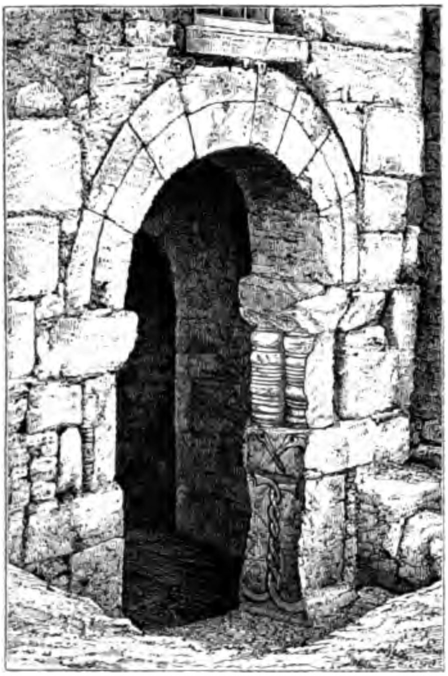
[1] This has been restored, as far as the materials admit, by Professor Willis, in his 'Architectural History of Canterbury Cathedral,' published in 1845.

Its walls and structure probably resembled the nave of Mortier en Der (Woodcut No. 376), or the Basse Œuvre at Beauvais (Woodcut No. 374)—plain piers supporting round arches below, and small circular-headed windows in a plain wall above.



565. Saxon Doorway at Monkwearmouth. (From a Photograph.)

Outside the original church of St. Augustine to the eastward—at what distance we unfortunately are not told—Cuthbert, the second archbishop, about the year 750 erected a circular church, "as a baptistery, and in order that it might serve as the burying-place of future archbishops;"[1] thus combining the two rites in a ceremonial church apart from the basilica, exactly as was done in Italy during the

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[1] 'Qui ecclesiam in orientali parte majoris ecclesiæ eidem pene contiguam in honore Beati Johannis Baptistæ fabricavit; ut et Baptisteria et examinationes Judiciorum, &c.—et Archiepiscoporum corpora in eâ sepelirentur."—'Anglia Sacra,' vol. ii. p. 75.

Romanesque age. It is by no means improbable that the eastern termination of the present cathedral known as Becket's Crown stands on the site of this old baptistery, and retains its dimensions; but it is difficult to prove this, so completely have all the features of the church been altered by subsequent rebuildings.

From what we know of Saxon MSS. and other indications, it would seem that painting was a favourite mode of decoration among the Saxons; and if so, their interiors may have been more successful as works of art than their external architecture would lead us to expect. But as no specimen of Saxon painted mural decoration has come down to our time, it is hardly safe to assume much with regard to this.

CHAPTER III.

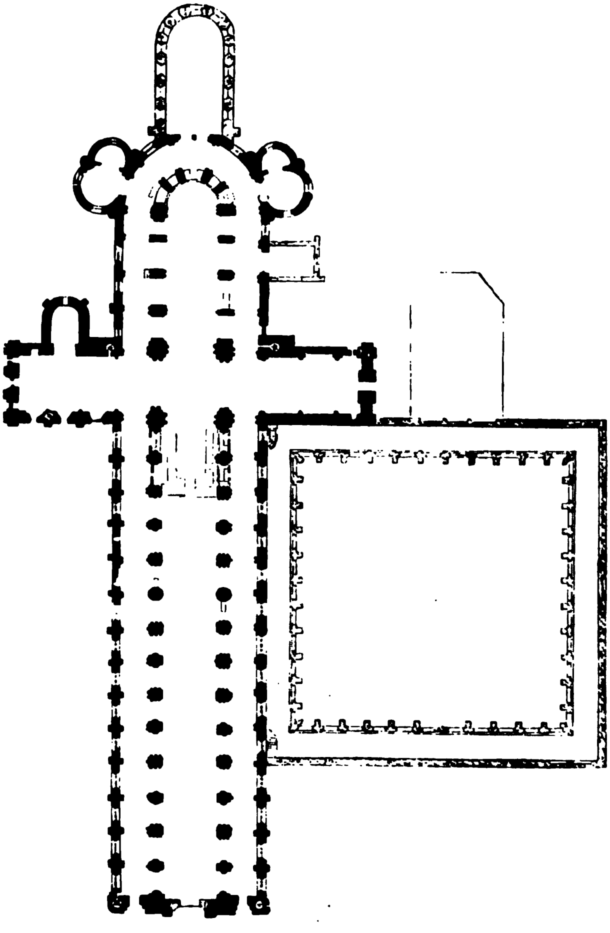
ENGLISH MEDIÆVAL ARCHITECTURE.

An entirely new state of affairs was inaugurated in 1066 by the Norman Conquest of England. A new aristocracy, new laws, and a new language infused new life and energy into every department of the State, and an age of unwonted activity and brilliancy superseded the lethargic misrule of the Saxon period.

In nothing was this more manifestly evident than in architecture. Instead of a clumsy, timid, half-wooden style, a real lithic art was introduced and adopted at once, on a scale of magnificence not known even in France at that time. Almost all our great cathedrals were either rebuilt, or at least remodelled, at that time, and great monastic institutions were founded all over the country, demanding churches and buildings on a scale undreamt-of before that time. The impulse thus given lasted for nearly five centuries, till the Saxon element in the population again came to the surface at the Reformation; but during that long period it continued without break or drawback, and forms a style complete and perfect in itself,—imported, it is true, in the first instance, but taking root in the soil, and with little aid from abroad growing into a thoroughly vigorous and acclimatised style. So completely is this the case, and so steady and uninterrupted was its progress, that it is impossible to separate its various stages one from another, but it is proposed to treat it as one style and in one chapter in the following pages. In a larger work it might be necessary to divide it into parts, but within our limits it will certainly be found more convenient, as it certainly is more logical, to treat it as a whole.

Plans of English Cathedral Churches.

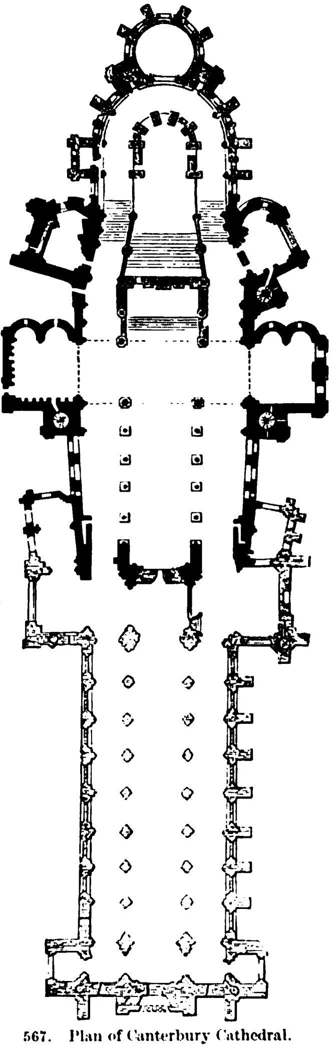
The most remarkable and universal peculiarity in the arrangement of English churches, when compared with those on the Continent, is their extraordinary length in proportion to their breadth. In this respect they seem to stand alone when compared with any buildings existing in other parts of the world. The ancients affected a double square; in other words, their temples were generally twice as long as they were broad. In the Middle Ages, on the Continent, this proportion was generally doubled. Practically the internal width was multiplied by 4 for the length. This at least seems to have been the proportion generally aimed at, though of course it was often modified by circumstances. In England the larger churches generally reached the proportion of 6 times their width for their length. Most of our cathedrals have been so altered and modified by subsequent additions that it is difficult now to trace their original arrangements; but Norwich exists in plan almost exactly as originally erected (A.D. 1096–1135), as will be seen from the plan (Woodcut No. 566). The nave to the west of the intersection is more than 4 times its width (70 × 295). The rectangular part of the choir is more than a square, and with the apse and its aisle, exclusive of the chapels, makes altogether a length of 410 ft. internally, or nearly 6 squares. At Peterborough and Ely the proportion seems to have been as 5 to 1 to the centre of the apse; but if there was a circumscribing aisle or chapel,



566. Plan of Norwich Cathedral. Scale 100 ft. to 1 in.

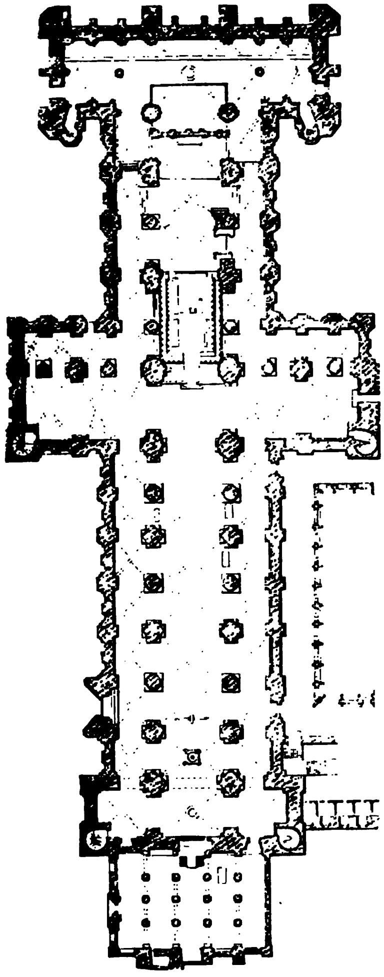
the longer proportion would obtain. At Canterbury and Winchester, and generally in the south-eastern cathedrals, as built more immediately under French influence, the original proportion was somewhat shorter; but so impressed were the English architects with the feeling that length was the true mode of giving effect, that eventually the two cathedrals last named surpassed it. Canterbury (Woodcut No. 567) attained an internal length of 518 ft. while the width of the nave is only 72, or as 7 to 1. At Winchester (Woodcut No. 570) these dimensions are 525 and 82, or something less than 7 to 1, owing to the greater width of the nave.

It is extremely difficult to assign a satisfactory reason for this peculiarity of English plans. It arises so suddenly, however, in the English churches of the Norman age that it must have pre-existed in those of the Saxons; though why they should have adopted it is by no means clear. If these churches had wooden roofs, which was almost certainly the case, their naves might easily have been wider, and it can hardly have arisen from any æsthetic motive. As we now judge them, these early naves were badly proportioned for hearing an address from the bishop or prior, and as ill adapted for a multitude to see what was passing at the altar; but for pictorial effect they surpass everything erected on the Continent, unless with greatly increased dimensions of height or width. Whether, therefore, it were hit upon by accident or by design, its beauty was immediately appreciated, and formed the governing principle in the design of all the English cathedrals. It was a discovery which has added more to the sublimity of effect which characterises most of our cathedrals than any other principle introduced during the Middle Ages.



567. Plan of Canterbury Cathedral. Scale 100 ft. to 1 in.

All the cathedrals above enumerated, indeed most of those which were designed by Norman prelates during the first half-century after the Conquest, were erected on very nearly the same plan as that at Norwich. Durham (1095–1133) was the first to show any marked deviation from the type[1] (Woodcut No. 568). The nave and choir became nearly proportioned to one another, and for the first time we see a distinct determination from the first that the building should be vaulted. All this involved an amount of design and contrivance which entirely emancipated us from the Continental type, and may be considered as laying the foundation of the English style.



568. Plan of Durham Cathedral. (From Billings.) Scale 100 ft. to 1 in.

In addition to what was doing at Durham there prevailed an extraordinary activity in church-building in the North of England during the whole of the 12th century, owing to the erection of the great abbeys whose gigantic fossils still adorn every main valley in Yorkshire. As this part of the country was more remote from foreign influence than the South, the style developed itself there with a vigour and originality not found elsewhere; but its effect was appreciated, and when Lincoln was rebuilt, about the year 1200, the English style was perfected in all essential parts. This is even more remarkably shown, however, at Salisbury, commenced in 1220 and completed in 1258.

In this church we have a plan not only extremely beautiful, but perfectly original. There is scarcely a trace of French or foreign influence; everything is the result of the native elaboration during the previous century and a half. The internal dimensions, according to Britton, are 450 ft. by 78, a little under the English standard, but sufficiently long for effect. The apsidal arrangement, so universal in Norman cathedrals, has disappeared never to return, except in Westminster Abbey (1245-1269), and in some readjustments, as at Tewkesbury; and the square eastern termination may henceforth be considered as established in this country — the early symbol of that independence which eventually led to the Reformation.

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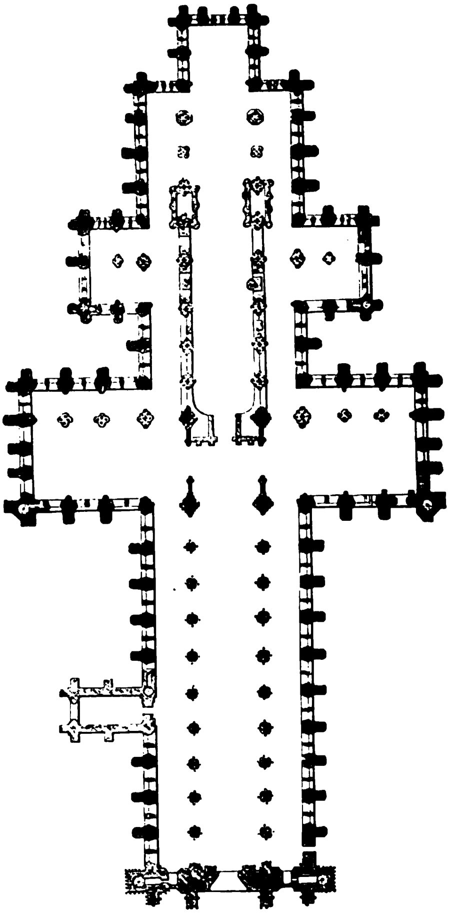
[1] The internal dimensions of Durham Cathedral are 413·10 feet, exclusive of the Galilee. The nave is 81 feet wide, the choir, 77·2. (Billings.)



569. Plan of Salisbury Cathedral. Scale 100 ft. to 1 in.

Once the Salisbury plan came to be considered the true English type, the Norman cathedrals were gradually modified to assimilate their arrangements to it. The nave and transept of Winchester were already too extensive to admit of a second transept, but the choir was rebuilt on the new model; and when afterwards the nave was remodelled by William of Wykeham it became one of the most beautiful, as it continued to be the longest, of English cathedrals (556 feet, over all).

About the same time Ely had a choir and presbytery added to it in lieu of the old Norman choir, which raised it to the very first rank among English churches;[1] and when, in 1322, by a fortunate accident the old Norman tower fell, the intersection was rebuilt in a manner that rendered it exceptionally pre-eminent among its rivals. There is perhaps no feature in the whole range of Gothic architecture either here or on the Continent more beautiful than the octagon of Ely (Woodcut No. 572), as rebuilt by Alan of Walsingham, the sacrist at the time the tower fell. He, and he alone of all northern architects, seems to have conceived the idea of abolishing what was in fact the bathos of the style—the narrow tall opening of the central tower, which, though possessing exaggerated height, gave neither space nor dignity internally to the central feature of the design. On the other hand, the necessity of stronger supports to carry the tower frequently contracted still more the one spot where, according to architectural propriety, an extended area was of vital importance to the due harmony of the design.

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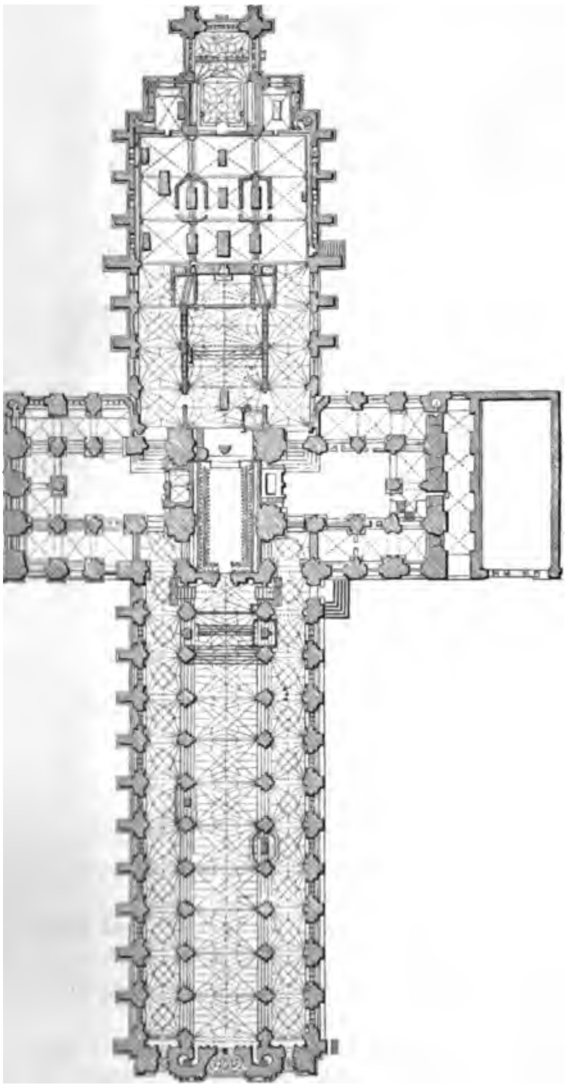
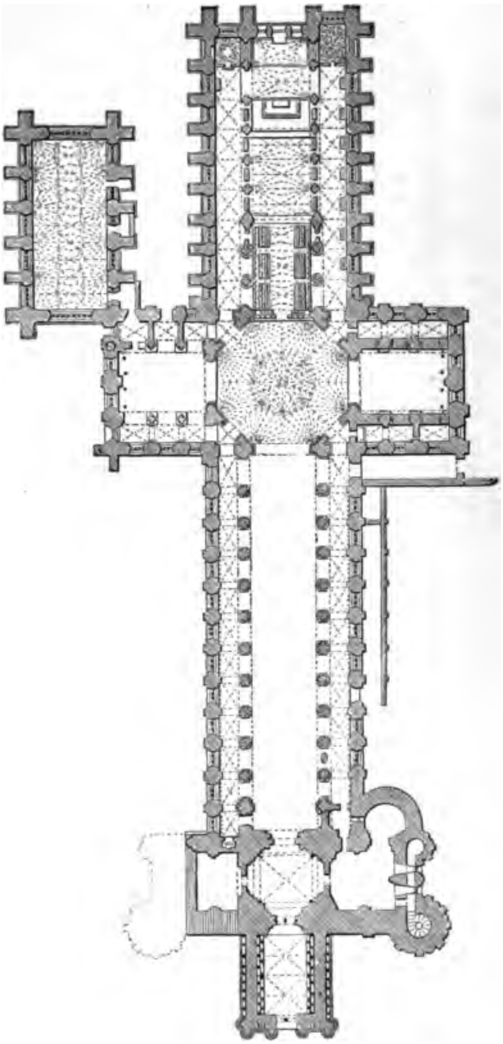
[1] The proper effect of this part of Ely Cathedral has been seriously marred by the erection of the new reredos. In itself a fair specimen of modern Gothic, it is placed so far from the choir as to lose its proper effect. It is painfully dwarfed by the large plain area in front of it. But worse than this, it cuts up and destroys the most beautiful presbytery in England after the Angel Choir at Lincoln. The architects of Walsingham's time glazed two compartments of the triforium to throw light upon the principal object in the choir, which was intended to stand two bays farther forward. It would have been well if the 19th-century restorers had taken the hint.



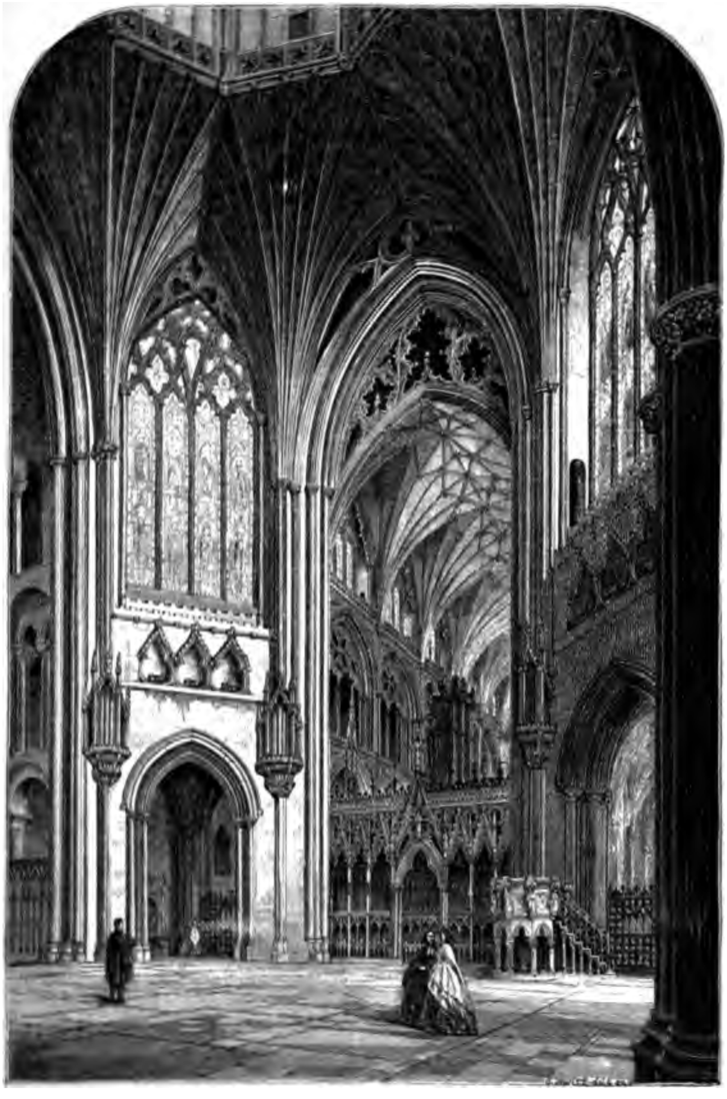
570. Plan of Winchester Cathedral. (From Britton.)
Scale 100 ft. to 1 in.

In the present instance the architect took for the base of his design the whole width of the nave and aisles, constructing in it an octagon, the sides of which are respectively 25 and 30 ft., and the diameter 65 ft. in one direction east and west, and 70 ft. transversely. By this arrangement a central area was obtained more than three times the extent of that originally existing, and, more than this, a propriety and poetry of design which are not to be found elsewhere. All this too was carried out with the exquisite details of the best age of English Gothic, and the effect in consequence is surpassingly beautiful. Unfortunately, either for want of funds, or of confidence in their ability to execute it, the vault, like that of York, is only in wood, though, from the immense strength of the supports, and their arrangement, it is evident that a stone vault was originally intended. The very careless—one might almost say ugly—way in which the lantern was finished externally, shows unmistakably that it was not intended to last long in its present form. Be that as it may, this octagon is in reality the only true Gothic dome in existence; and the wonder is, that being once suggested, any cathedral was ever afterwards erected without it. Its dimensions ought not to have alarmed those who had access to the domes of the Byzantines or Italians. Its beauty ought to have struck them as it does us. Perhaps the true explanation lies in the fact that it was invented late in the style. New cathedrals or great churches were very rarely commenced after the death of Edward the Third; and when they were, it was by masons, not by educated gentlemen, that they were designed.



571. Plan of Ely Cathedral. (From Dugdale.)
Scale 100 ft. to 1 in.

After this, very little novelty was introduced into the design of English cathedrals. York, however, was almost entirely rebuilt in the form towards which the architects were tending during the whole of the Middle Ages, and it may consequently be considered as the type at which they were aiming, though hardly the one to which we can give



672. Octagon at Ely Cathedral. (From Murray's 'Cathedral Handbook.')

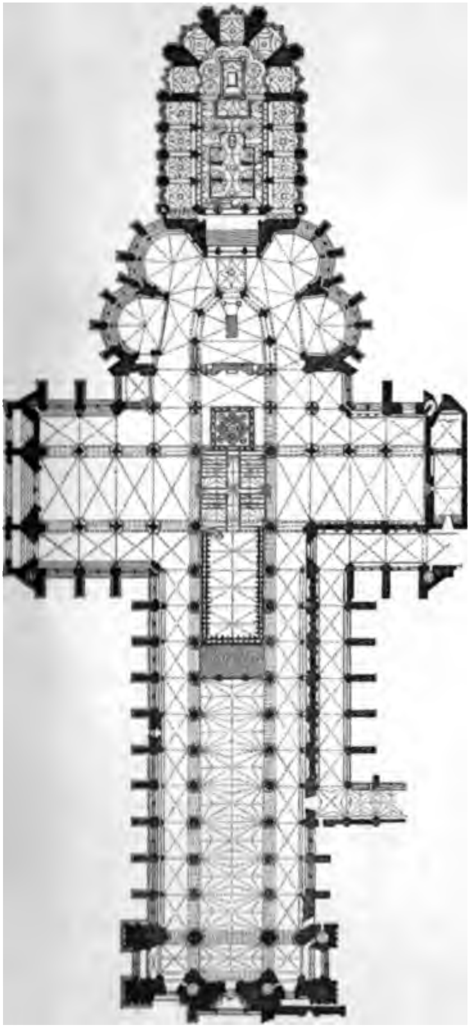
the most unqualified praise. The nave was erected between the years 1201 and 1331, the choir between 1361 and 1405; the length internally is 480 ft.; the width of the choir, 100 ft.; of the nave, 106 ft.; both these last were, unfortunately, dimensions which the architects did not feel themselves equal to grappling with in stone, so that the roof, like the lantern at Ely, was constructed of wood, in imitation of a stone vault, and remains so to this day.

Owing to the great width attempted for the nave, York has not the usual proportion of length affected by other English cathedrals, and loses in effect accordingly. Its great peculiarity is the simplicity and squareness of its plan, so unlike what is found anywhere abroad. The church is divided into two equal parts; one devoted to the laity, one to the clergy. There are no apsidal or other chapels. Three altars stood against the eastern wall, and it may be 3 or 4 in the transept. Beyond this nothing. There is none of that wealth of private chapels which distinguishes Continental cathedrals and churches, or even Canterbury, the most foreign of our English examples. The worship even at that early period was designed to be massive and congregational, not frittered away in private devotion or scattered services, and marks a departure from Continental practices well worthy the attention of those who desire to trace the gradual development of the feelings of a people as expressed in their architecture, and the architecture only.

The abbey church at Westminster is exceptional among English examples, and is certainly, in so far at least as the east end is concerned, an adaptation of a French design. The nave, however, is essentially English in plan and detail, and one of the most beautiful examples of its class to be found anywhere. So, too, are the wide-spreading transepts; but eastward of these the form is decidedly that of a French cathedral. Henry VII.'s Chapel now occupies the space formerly occupied by the Lady Chapel; but before it was pulled down the circlet of apsidal chapels was as completely and as essentially French as any to be found in the country where that feature was invented. In the choir, however, the architects betrayed their want of familiarity with the form of termination they had selected. The angle at which the three bays of the apse meet is far from pleasing, and there is a want of preparation for the transition, which tends to detract from the perfection of what would otherwise be a very beautiful design.

As the choir was sepulchral, to accommodate the shrine of the Confessor, the design was appropriate, and its introduction in this instance cannot be regretted; but on the whole, there is nothing in the church of Westminster to make us wish that this feature had become more common on this side of the Channel.

Notwithstanding the beauty of the result, it may still be considered as open to discussion whether the English architects were always correct in adhering to length in preference to height as the modulus of their designs. When, however, we reflect how immensely the difficulties of constructing a stone roof are increased by every addition to the width or height of the vault, we cannot but acknowledge their wisdom in stopping at that point where sufficient spaciousness was attained, without increasing constructive difficulties. Nowhere in English cathedrals are we offended by mechanical *tours de force.* Everywhere there is sufficient solidity for security, and a consequent feeling of repose most conducive to true architectural effect.



673. Plan of Westminster Abbey. Scale 100 ft. to 1 in.

It may also be remarked that the strain of turning the head upwards detracts considerably from the pleasure of contemplating tall interiors, while the eye likes to dwell on long-drawn vistas which can be explored in a natural position. But, perhaps, the greatest advantage of moderate dimensions in section is that they do not dwarf either the worshippers or the furniture of the church. Everything in an English cathedral is in just proportion, which is certainly not the case in many Continental examples; and there is variety and a play of light and shade in the long aisles of our churches which is wholly wanting in the one great hall of French and German examples.

Another point on which a difference of opinion may fairly exist is, whether the square termination of our cathedrals is or is not more beautiful than the apsidal arrangements so universal abroad.

When, as at Salisbury, or Wells, or Exeter, there is a screen of open arches below the east window, it may safely be asserted that a polygonal termination would have been more pleasing; but when, as at York, or Gloucester, or Carlisle, the whole eastern wall is a screen of painted glass, divided by mullions and tracery of most exquisite design, judgment will probably go the other way. Such a window as that at York, 33 ft. in width by 80 ft. in height, is a marvellous creation, which few architectural developments in any part of the world can rival or even approach. On the whole, perhaps, the true answer to the question is that, where a number of smaller chapels are wanted, the chevet form is the best and most artistic termination for a church; where these are not required, the square form is the most beautiful, because it is the most appropriate, and, like everything appropriate, capable of being made beautiful in the hands of a true artist.

VAULTS.

Whatever opinion may be formed as to the proportions of English cathedrals, or the arrangement of their plans, there can be no dispute as to the superiority of their vaults over those of all their Continental rivals. The reasons for this are various, and not very recondite. The most obvious is the facility of construction which arose from the moderation just pointed out in the section of our churches.

The English always worked within their strength, instead of going to the very verge of it, like the French; and they thus obtained the power of subordinating constructive necessities to architectural beauty. Thus the English architects never attempted a vault of any magnitude till they were sufficiently skilled in construction to do it with facility. In a former chapter it has been pointed out how various and painful were the steps by which the French arrived at their system of vaulting—first by pointed tunnel-vaults and a system of domes, then by a combination of quadripartite and hexapartite intersecting vaults, of every conceivable form and variety, but always with a tendency to domes, and to the union of all pre-existing systems. This experimentalising, added to the great height of their roofs and the slenderness of their clerestories, never left them sufficiently free to admit of their studying æsthetic effects in this part of the construction.

A second reason was, that for 150 years after the Conquest, our architects were content with wooden roofs for their naves. One of the earliest vaults we possess is that at Durham, commenced by Prior Melsonby, 1233. Long before that time the French architects had been trying all those expedients detailed at pp. 515, 516 of Vol. I., and had thus succeeded in vaulting their central aisles a century before we attempted it. In doing so, however, their eyes got accustomed to mechanical deformities which we never tolerated, and they were afterwards quite satisfied if the vault would stand, without caring much whether its form were beautiful or not.

A third cause of the perfection of English vaults arose from the constant use of ornamental wooden roofs throughout the Middle Ages. The typical example of this form now remaining to us is that of Westminster Hall. But St. Stephen's Royal Chapel had one of the same class, and there is reason to believe that they were much more common than is usually supposed.[1] All these were elaborately framed and richly carved and ornamented, often more beautiful than a stone vault, and quite as costly; and it seems impossible that a people who were familiar with this exquisite mode of roofing could be content with the lean twisted vaults of the Continental architects. The English alone succeeded in constructing ornamental wooden roofs, and, as a corollary, alone appreciated the value of a vault constructed on truly artistic principles and richly ornamented. Their eyes being accustomed to the depth and boldness of timber construction could never tolerate the thin weak lines of the French ogive, just sufficient for strength, but sadly deficient in expression and in play of light and shade.

Although it is, perhaps, safe to assert that there is not, and never was, a Saxon vaulted church in existence; and that, during the purely Norman period, though the side-aisles of great churches were generally vaulted, the central aisle was always ceiled with wood; yet, from a study of their plans, we are led to conclude that their architects always intended that they should, or at least might, be ornamented with stone roofs.

In the first place the area of their piers is enormous, and such as could never have been intended to support wooden roofs. Even making every allowance for the badness of the masonry, one-tenth of the sectional area would have sufficed, and not more was employed cotemporaneously in Germany when it was intended to use wooden roofs. There is also generally some variation in the design of the alternate piers, as if a hexapartite arrangement were contemplated. But the evidence is not conclusive, for the vaulting shafts are usually similar, and in all instances run from the ground through the clerestory, and terminate with the copings of the wall, so that, in their present form, they could only be meant to support the main timber of the roof. It may be that it was intended to cut them away down to the string-course of the clerestory, as was actually done at Norwich in 1446, when the nave was vaulted; but at present we must be satisfied with the evidence that the architects were content with such roofs as that of Peterborough (Woodcut No. 574), which is the oldest and finest we possess. It is very beautiful, but certainly not the class of roof these massive piers were designed to support.

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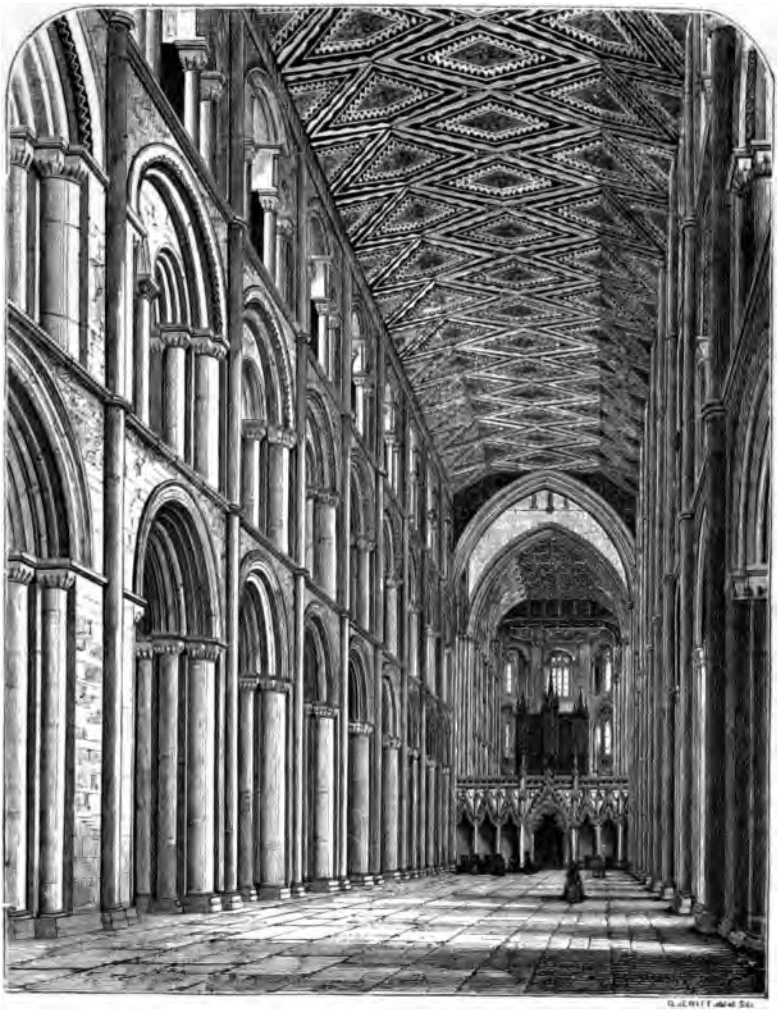
[1] The roofs here alluded to must not be confounded with the barn-like roofs of remote village churches which modern architects are so fond of copying, but such roofs as that of St. Stephen's Chapel, and many of those of the Lancastrian era.

Though we may hesitate with regard to the intention of the builders of Norwich, Ely, or Peterborough, there can be no doubt, from the alternate piers and pillars, that when Durham (Woodcut No. 568) was commenced it was intended that the nave should be covered by a great hexapartite vault. Before, however, the intention could be carried out, the art of vaulting had been so far perfected that that



574. Nave of Peterborough Cathedral.[1] (Cath. Hb.)

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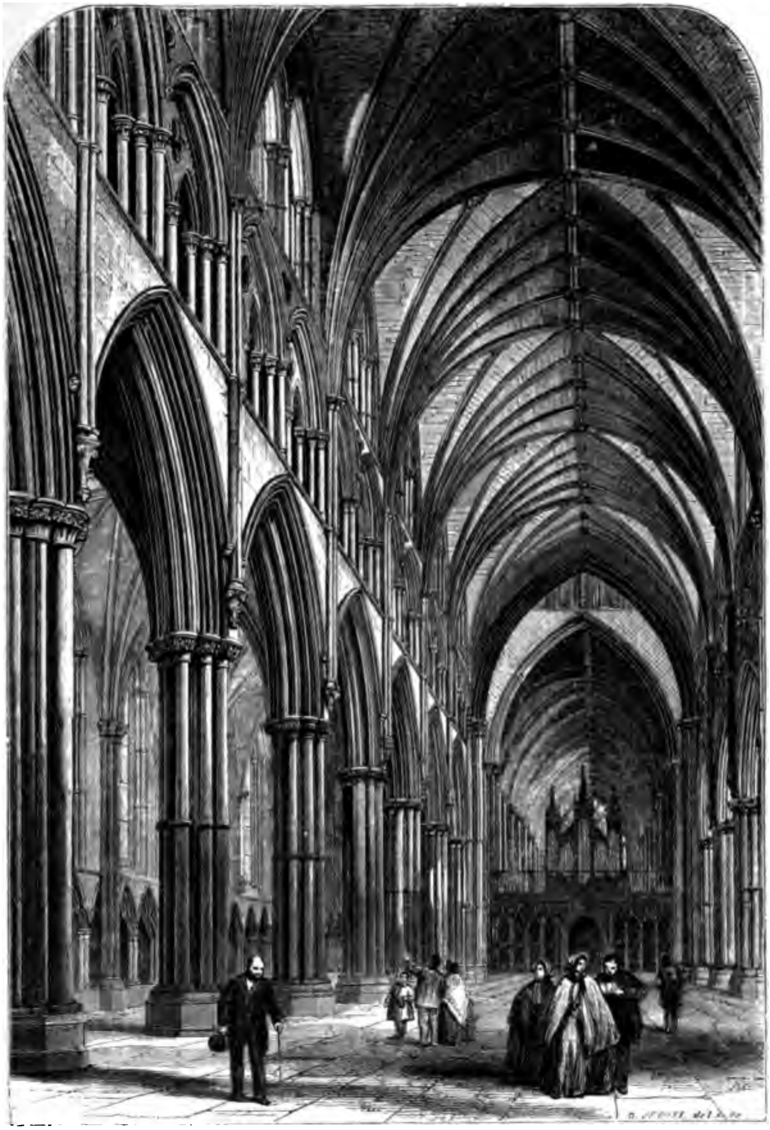
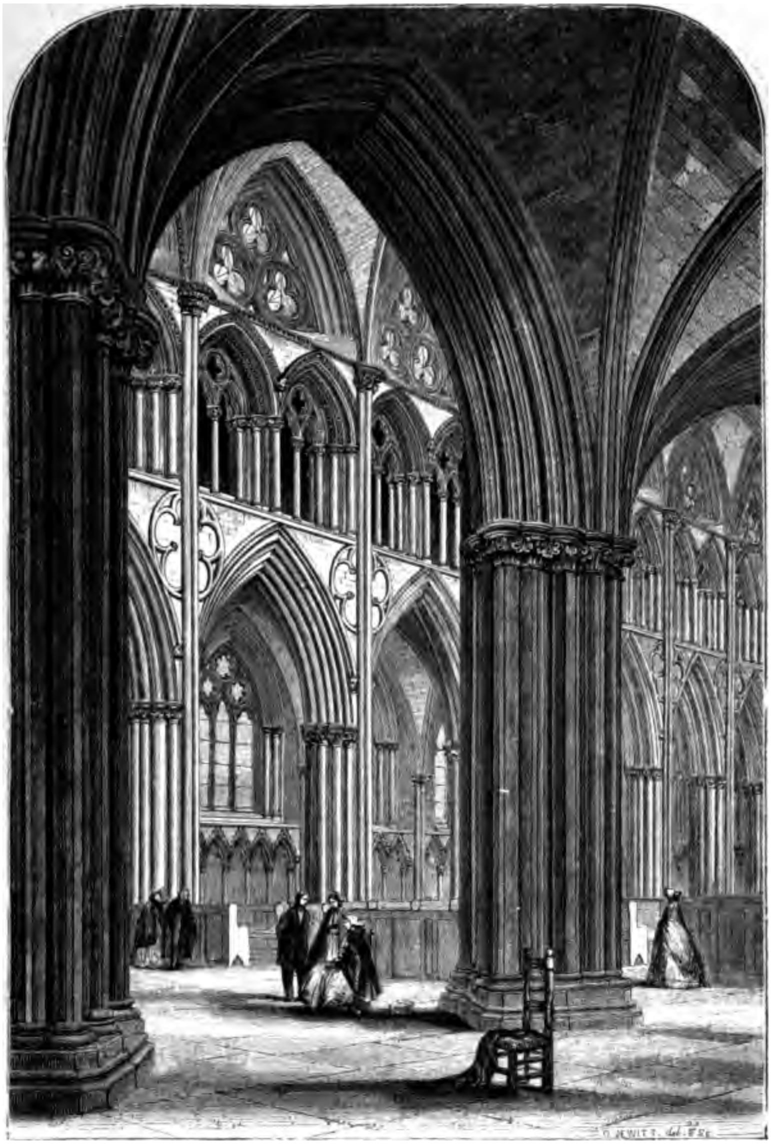
[1] This, and a considerable number of the woodcuts in this chapter, are borrowed from the plates of the beautiful series of 'Handbooks of the English Cathedrals,' in course of publication by Mr. Murray. In order to prevent needless repetition, they are marked Cath. Hb.

very clumsy expedient was abandoned; and, by the introduction of a bracket in the nave, and afterwards of a vaulting shaft in the choir, a vault of the usual quadrilateral form was successfully carried out between the years 1233 and 1284.



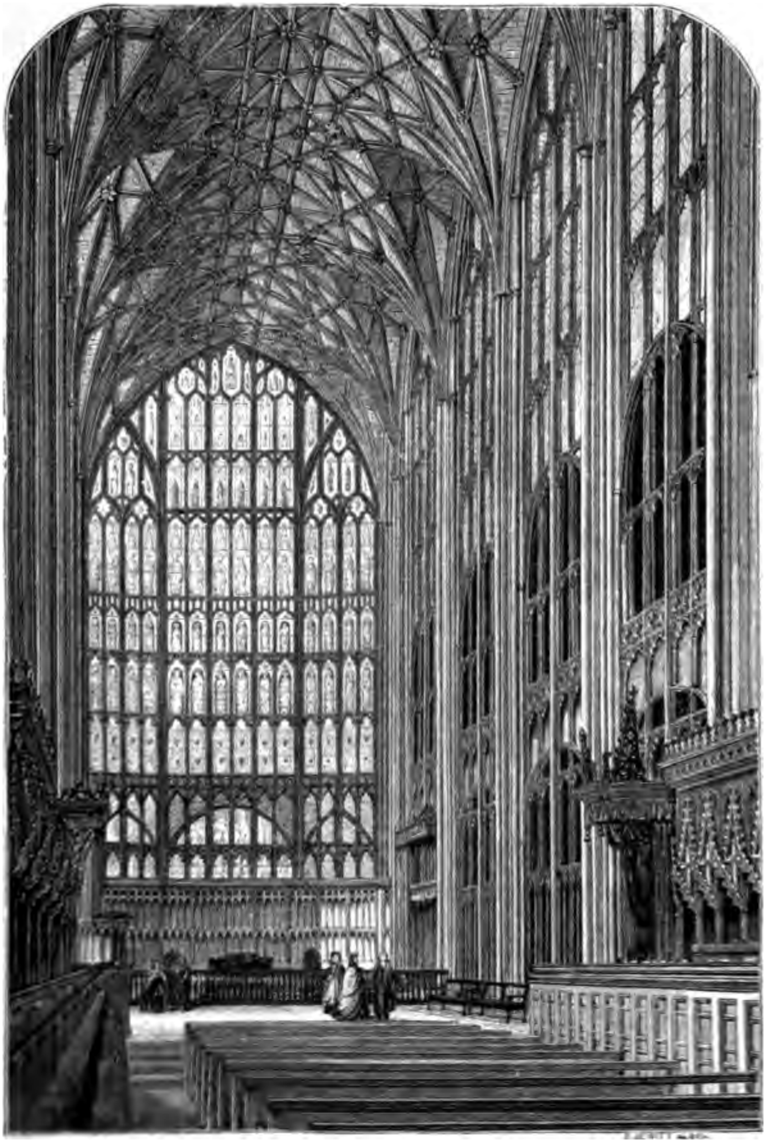
575. Nave of Lincoln Cathedral. (Cath. Hb.)

It is probably to St. Hugh of Lincoln that we owe the first perfect vault in England. Coming from Burgundy he must have been familiar with the great vaults which had been constructed in his country long before the year 1200, when he encouraged his new followers to undertake one not necessarily in the Burgundian style, but in that form with which they were conversant from their practice in erecting smaller side-vaults. He built and roofed the choir of Lincoln, immediately after which (1209–1235) the nave (Woodcut No. 575) was undertaken



576. Nave of Lichfield Cathedral. (Cath. Hb.)

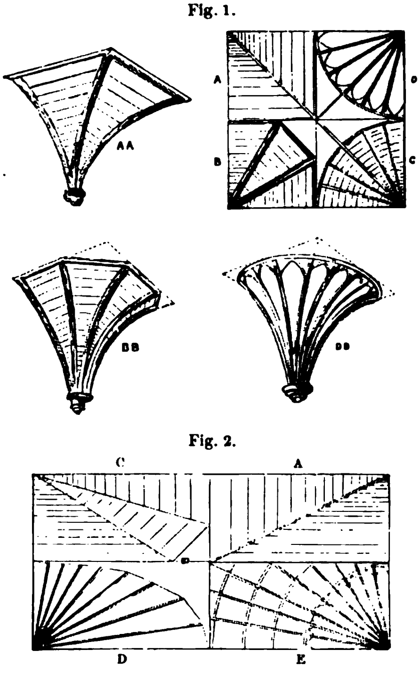
by Hugh of Wells, and its roof may be taken as a type of the first perfected form of English vaulting. It is very simple and beautiful; but it cannot be denied – and this is felt still more at Exeter—that the



[illegible] Gloucester Cathedral. [illegible] 118

great inverted pyramidal blocks of the roof are too heavy for the light piers and pierced walls which support them. Another defect is, that the lines of the clerestory windows do not accord with the lines of the "severeys" of the vault. This defect was remedied at Tichfield, but nowhere else, until the invention of the four-centred arch and of fan-tracery. At Lichfield (Woodcut No. 576) the triangular form of the clerestory windows afforded a perfect solution of the difficulty, and gave a stability and propriety to the whole arrangement that never was surpassed, and never might have been relinquished had not their fatal fondness for painted glass forced the architects in this, as in other instances, to forego constructive propriety for indulgence in that fascinating mode of decoration.

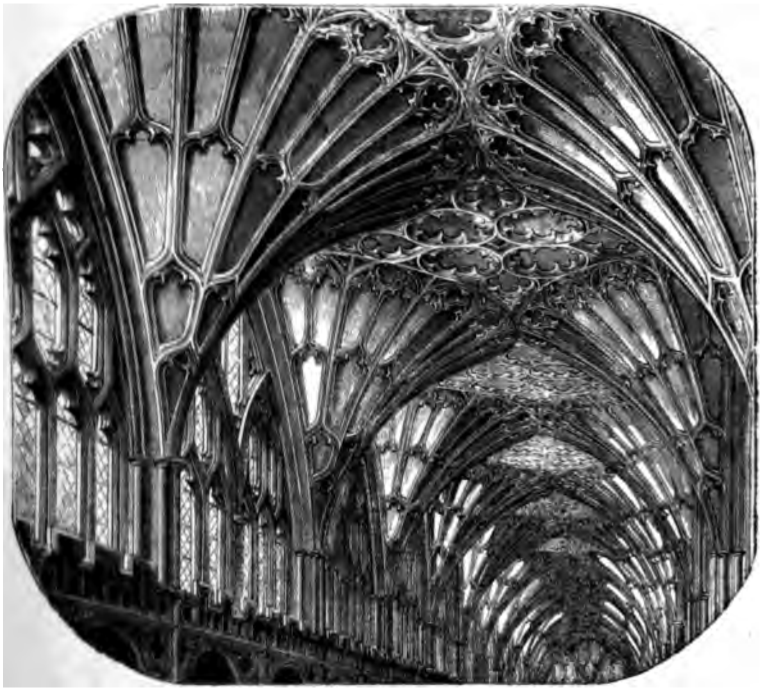
Beautiful as these simple early roofs were felt to be, the great mass of the "severeys," or inverted pyramids, formed a very obvious defect. It was, however, easily remedied when once perceived. The earliest example of its successful removal is probably in the roof of the choir at Gloucester)(1337-1377)Woodcut No. 577). In this instance the roof is almost a tunnel-vault with the window spaces cutting into it, so as to leave nearly one-third of the space unbroken; and, as the whole is covered with rich and appropriate tracery, the effect is highly pleasing. The same principle was afterwards carried to its utmost perfection in the roof of St. George's Chapel at Windsor. In that case a flat band was introduced as a separate constructive compartment in the centre, supported by the severeys, and as the roof is ornamented with ribbings of the most exquisite design, it forms perhaps the most beautiful vault ever designed by a Gothic architect.



578. Diagrams of Vaulting.

The great invention of the English architects in vaulting is the form usually known as fan-tracery. It is so beautiful in itself, and so exclusively English, that it may, perhaps, be worth while to retrace the steps by which it was arrived at. This may lead to a little repetition, but the stone vault is so essentially the governing modulus of the style that its principles cannot be made too clear.

The original form of the intersecting vault is that of two halves of a hollow-sided square pyramid placed opposite one another in an inverted position.[1] One half of such a vault is shown at A and A A (Woodcut No. 578, fig. 1). The English seem early to have tired of the endless repetition of these forms, and, after trying every mode of concealing their sameness by covering them with tracery, they hit on the happy expedient of cutting off their angles, as shown at B and BB. This left a flat square space in the centre, which would have been awkward in the central vault, though in a side-aisle it was easily got over, and its flatness concealed by ornament. Arrived at this stage, it was easy to see that by again dividing each face into two, as at C, fig. 1, the principal original lines were restored, and the central space could be subdivided by constructive lines to any extent required. By this process the square pyramid had become a polygonal cone of 24 sides, which was practically so near a circle that it was impossible to resist the suggestion of making it one, which was accordingly done, as shown at D and D D, fig. 1.



579. Roof of Cloister, Gloucester.

So far all was easy, but the fact of the flat central space resting on the four cones was still felt to be a defect, as indeed is apparent in

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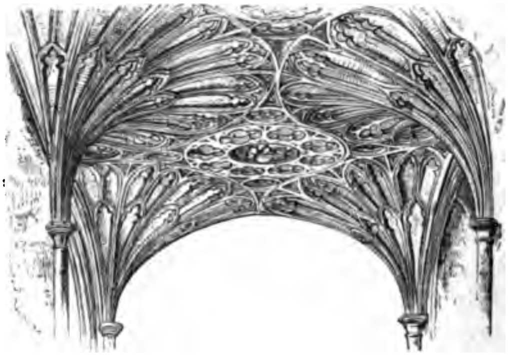
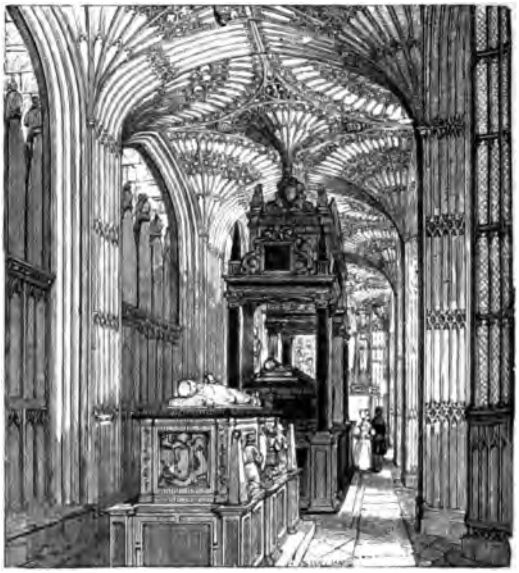
[1] This has already been explained in the chapters on French architecture in Vol. I., especially at pages 510 and 571.

such a vault as that of the cloisters at Gloucester (Woodcut No. 579), where a segment is used nearly equal to an equilateral spherical triangle. In this case they did not dare to employ a constructive decoration, but covered the space with circles so as to confuse and deceive the eye. At Windsor (Woodcut No. 580) the defect was obviated by using a low four-centred arch invented for the purpose, so that the outer tangent of the conoid was nearly flat, and the principal transverse rib was carried to the centre without being broken—as the others might have been had that mode of decoration been deemed expedient. This may be considered the perfection of this kind of vaulting, and is perhaps the most beautiful method ever invented. At Westminster (as shown in Woodcut No. 581) the difficulty was got over by reversing the curve by the introduction of pendants. This was a clever expedient, and produced a startling effect, but is so evidently a *tour de force* that the result is never quite satisfactory; though on a small scale perfectly admissible.



580. Vault of Aisle at St. George's, Windsor.



581. Aisle in Henry VII.'s Chapel, Westminster.

These devices all answered perfectly so long as the space to be roofed was square, or nearly so; but when this mode of vaulting came to be applied to the bays of the central nave, which were twice as long in one direction as in the other, the difficulties seemed insuperable. By cutting off the angle as in the former instance (as at B, fig. 2, Woodcut No. 578), you may get either a small diamond-shaped space in the centre or a square, but in both cases the pyramid becomes very awkward; and by carrying on the system as before, you never arrive at a circle, but at an elliptical section as shown at D, fig. 2, Woodcut No. 578).

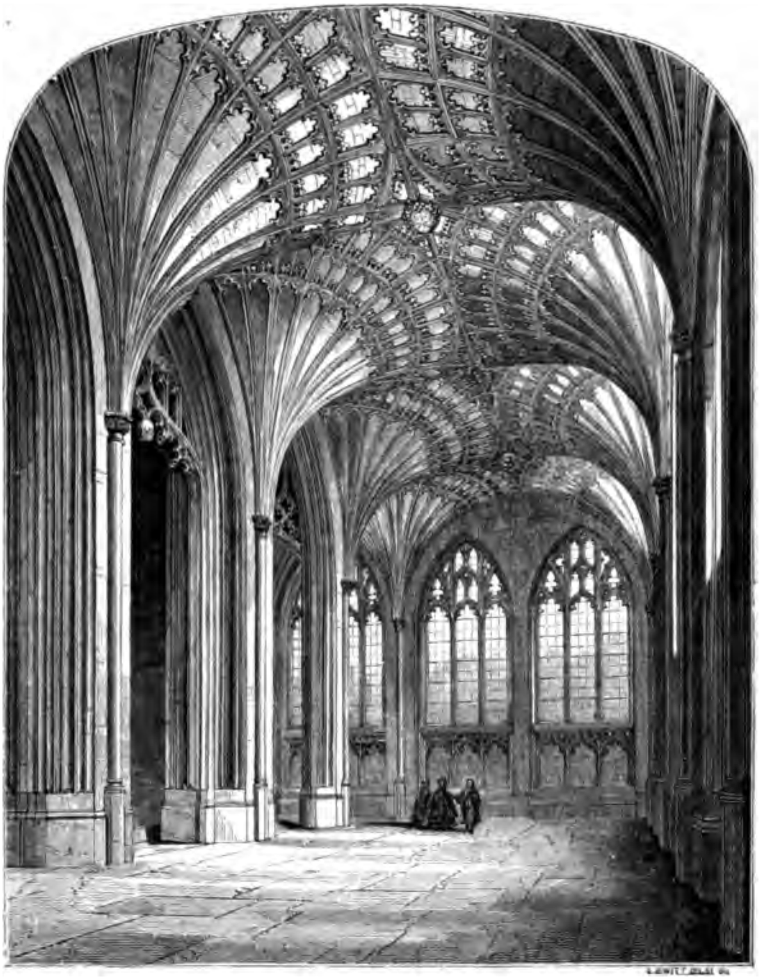
The builders of King's College Chapel strove to obviate the difficulty by continuing the conoid to the centre, and then cutting off what was redundant at the sides, as in E, fig. 2, or, as shown in the view of the interior (Woodcut No. 610) further on.

The richness of the ornaments, and the loftiness and elegance of the whole, lead us to overlook these defects at Cambridge, but nothing can be less constructive or less pleasing than the abruptness of the intersections so obtained. In the central aisle of Henry VII.'s Chapel it was avoided by a bold series of pendants, supported by internal flying buttresses, producing a surprising degree of complexity, and such an exhibition of mechanical dexterity as never fails to astonish, and generally to please; though it must be confessed that it is at best a mere piece of ingenuity very unworthy of English art. By far the most satisfactory of these roofs is that at Windsor, where a broad flat band is introduced in the centre of the roof, throughout the whole length of the chapel. This is ornamented by panelling of the most exquisite design, and relieved by pendants of slight projection, the whole being in such good taste as to make it one of the richest and probably the most beautiful vault ever constructed. It has not the loftiness of that at Cambridge, being only 52 ft. high, instead of 78, nor is it of the same extent, and consequently it does not so immediately strike observers, but on examination it is far more satisfactory.

The truth of the matter seems to be that, after all their experience, the architects had got back to precisely the point from which they started, namely, the necessity of a square space for the erection of a satisfactory intersecting vault. The Romans saw this, and never swerved from it. The side-aisles of all cathedrals and all cloisters adhered to it throughout; and, when it was departed from in the wider central aisles, it always led to an awkwardness that was hardly ever successfully conquered. In some instances, as in the retro-choir at Peterborough (1438–1528), two windows are boldly but awkwardly included in one bay (Woodcut No. 582), and the compartments are so nearly square that the difficulty is not very apparent, but it is sufficient to injure considerably the effect of what would otherwise be a very beautiful roof.

In Henry VII.'s Chapel the difficulty was palliated, not conquered, by thrusting forward the great pendants of the roof and treating them as essential parts of the construction, and as if they were supported by pillars from the floor instead of by brackets from the wall. By this means the roof was divided into rectangles more nearly approaching squares than was otherwise attainable; but it is most false in principle, and, in spite of all its beauty of detail, cannot be considered successful.

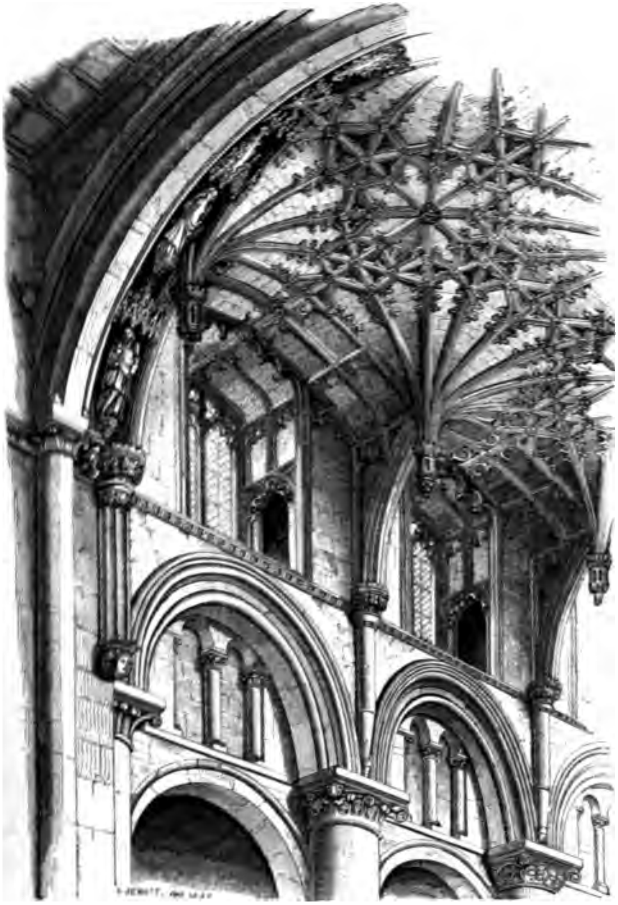
Strange as it may appear from its date, the most satisfactory roof of this class is that erected by Cardinal Wolsey in the beginning of the 16th century over the choir of Oxford Cathedral. In this instance the pendants are thrust so far forward and made so important that the central part of the roof is practically quadripartite. The remaining difficulty was obviated by abandoning the circular horizontal outline of true fan-tracery, and adopting a polygonal form instead. As the whole is done in a constructive manner and with appropriate detail,



582. Retro-choir, Peterborough Cathedral. (Cath. Hb.)

this roof—except in size—is one of the best and most remarkable ever executed.

The true solution of the difficulty, in so far as the roof was concerned, would have been to include two bays of the side-aisles in one of the centre; but this would have necessitated a rearrangement of both plan and exterior to an extent the architects were not then prepared to tolerate, and it never was attempted, except perhaps in the instance of the retro-choir at Peterborough (Woodcut No. 582). Had it been done in King's College Chapel at Cambridge (Woodcut No. 610), it would have been in every respect an immense improvement. At present the length of King's Chapel is too great for its other dimensions. Had there been six bays instead of twelve, its apparent length would have been considerably diminished, and the variety introduced by this



[illegible] Choir Arches of Oxford Cathedral. (Cath. Hb.)

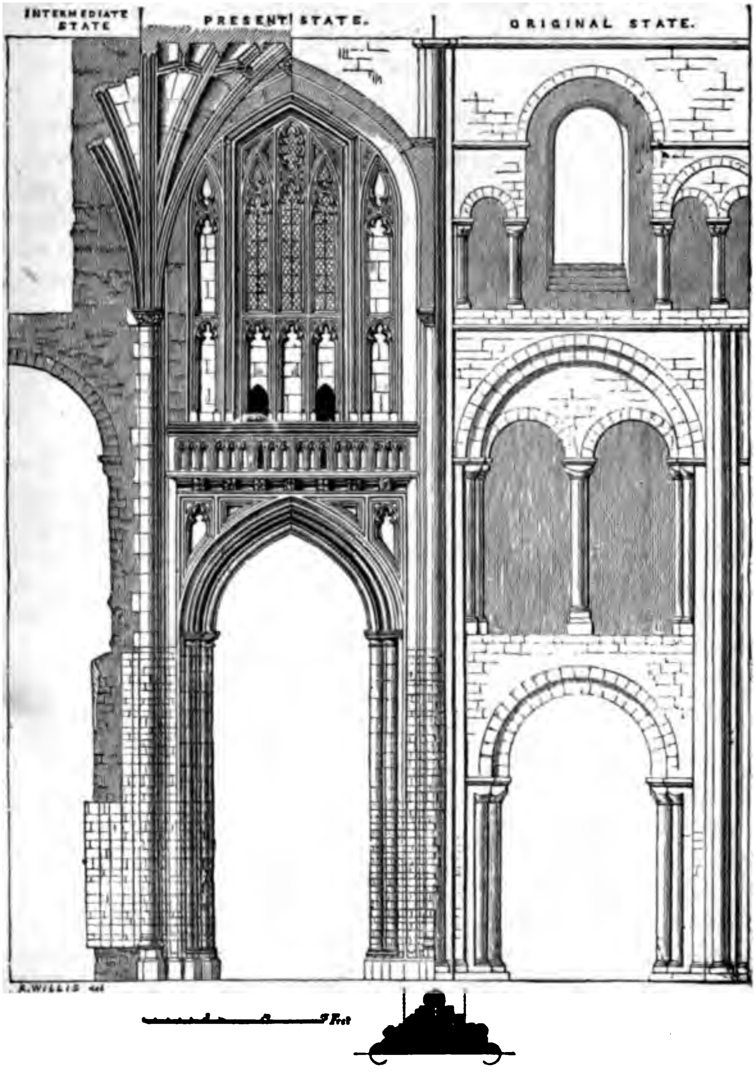
change would have relieved its monotony without detracting from any of the excellent points of design it now possesses.

The English architects never attempted such vaults as those of Toulouse and Alby, 63 and 58 ft. respectively, still less such as that of Gerona in Spain, which is 72 ft. clear width. With our present mechanical knowledge, we could probably construct wider vaults still. Even the Mediæval architects in England might have done more in this direction than they actually accomplished, had they tried. On the whole, however, it seems that they exercised a wise discretion in limiting themselves to moderate dimensions. More poetry of design and greater apparent size is attainable by the introduction of pillars on the floor, and with far less mechanical effort. Unless everything is increased in even a greater ratio, the dwarfing effect of a great vault never fails to make itself painfully apparent. We may regret that they did not vary their vaults by such an expedient as the lantern at Ely, but hardly that they confined them to the dimensions they generally adopted.

Pier Arches.

Although the principles adopted by the English architects did not materially differ from those of their Continental confrères with regard to the arrangement of pier arches and the proportions of triforia and clerestories, still their practice was generally so sound and the results so satisfactory, that this seems the best place to point out what the Mediæval architects aimed at in the arrangement of their wall surfaces.

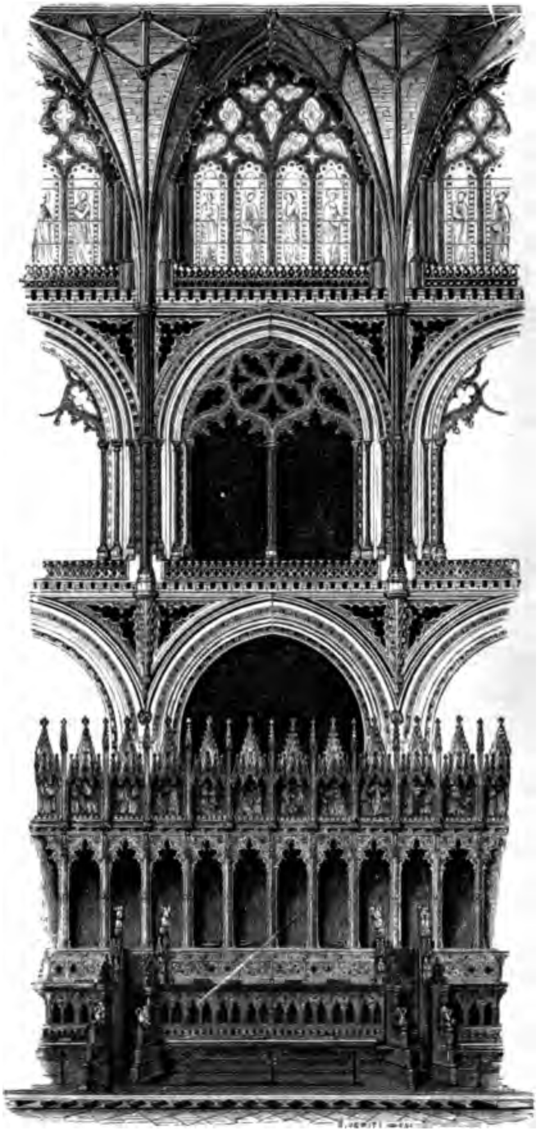
In the Norman cathedrals the general scheme seems to have been to divide the height into three equal parts, and to allot one to the pier arch, another to the triforium or great gallery, and the third to the clerestory. In all the examples we now have, the upper is the smallest division; but I cannot help fancying that some arrangement of the timbers of the roof gave the additional height required. It is generally supposed that the roof at Peterborough (Woodcut No. 574) was originally flat. This, however, is by no means clear, nor that it started so low; but, be that as it may, the woodcut (No. 584) will explain the usual arrangement, as well as the changes afterwards introduced. At Winchester the two lower divisions are practically equal, the upper somewhat less, and the alternate arrangement of the piers hints at a hexapartite vault, if such should ever come to be executed. When William of Wykeham undertook to remodel the style of the nave, he first threw the two lower compartments into one, as shown on the left-hand side of the cut. He then divided the whole height, as nearly as the masonry would allow him, into two equal parts, allotting one to the pier arches, and apportioning the upper as nearly as he could by giving two-thirds to the clerestory and one-third to the triforium. With pointed arches this was the most pleasing and satisfactory arrangement adopted during the Middle Ages; but when something very like it was attempted in the nave of Gloucester with round arches, the effect was most unpleasing. Before the architects, however, settled down to this proportion, a variety of experiments were tried. One of the most successful was, the nave of Lichfield Cathedral (Woodcut No. 576). Here the whole height is divided equally: one half is given to the



584. Transformation of the Nave, Winchester Cathedral. (Cath. Hb.)

pier arches, and the other divided equally between the clerestory and triforium. If the latter had been glazed externally, as was the case at Westminster Abbey and elsewhere, and made to look like part of the church, the whole might be considered as satisfactory. As it is, the area of the clerestory is so much less than that of the triforium, that the proportion is not quite agreeable, though the solidity and repose which this arrangement gives to the roof is above all praise.

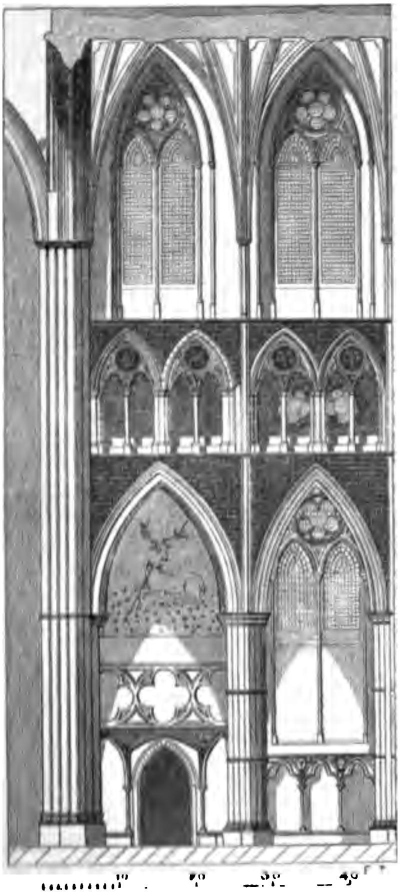
All these objections were obviated in the three bays of the choir at Ely, which were rebuilt by Walsingham at the same time as the octagon. Here the triforium and clerestory are equal; but the upper window is so spread out, and so much is made of it, that it looks equal to the compartment below. The pier arch below is also subdued to less than half the whole height, so as to give value to the upper division. These proportions are derived from the very beautiful Early English presbytery beyond; but they are here used with such exquisite taste and such singular beauty of detail that there is perhaps no single portion of any Gothic building



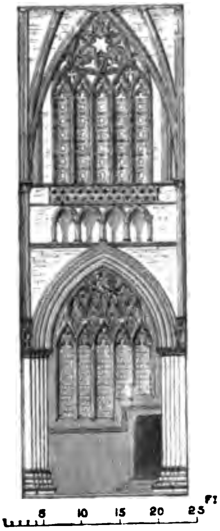
585. Choir of Ely Cathedral. (Cath. Hb.)

in the world which can vie with this part of the choir of Ely for poetry of design or beauty of detail.

The perfection of proportion, as of many other things, was reached in Westminster Abbey (1245–1269). Here the whole height is divided into two equal parts, and the upper subdivided into three, of which one is allotted to the triforium, and two to the clerestory. It is true this involves the necessity of springing the vault from a point half way down the clerestory windows, and thus the lines of the severeys do not quite accord with those of the lights; but at best it is a choice of difficulties, and the happy medium seems to have been reached here more successfully than elsewhere. The proportion of the width of a bay to its height is here also most pleasing: it is as 1 to 5¼.[1] Sometimes, as at Exeter, it sinks as low as 1 in 8, but the whole effect of the building is very much destroyed by the change.



586. Two Bays of the Nave of Westminster Abbey. Scale 25 ft. to 1 in.



587. One Bay of Cathedral at Exeter. Scale 25 ft. to 1 in.

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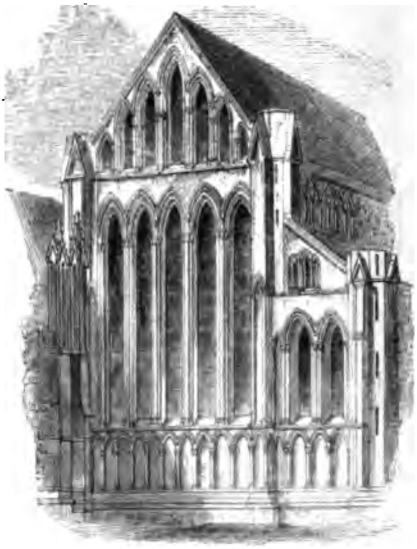
[1] In Woodcut No. 586 the right-hand bay is that of the nave generally, the left-hand bay is adapted to the greater width of the aisle of the transept, and is less pleasingly proportioned in consequence. Woodcuts Nos. 586 and 587 are drawn to the scale of 25 feet to 1 inch, or double that usually employed for elevations in this work.

Shortly after this, as in the choir at Lichfield (1250–1325) or at Exeter (1308–1369), the mania for the display of painted glass upset all these arrangements—generally at the expense of the triforium. This feature was never entirely omitted, nor was it ever glazed internally, as was frequently the case on the Continent; but it was reduced to the most insignificant proportions—sometimes not pierced—and, with the wider spacing just alluded to, deprived the English side screen of much of that vigour and beauty which characterised its earlier examples.

Window Tracery.

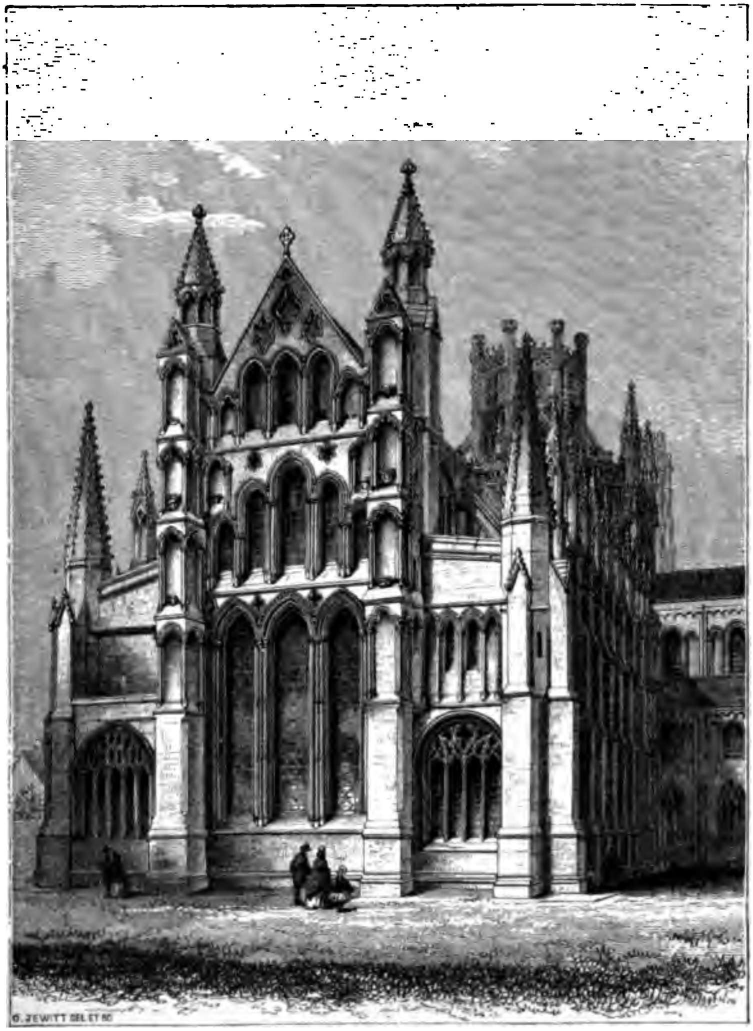
The date of the introduction of the pointed arch in England—for it may be considered as established that it was *introduced*—is a question which has been much discussed, but is by no means settled. The general impression is that it was at the rebuilding of the cathedral of Canterbury after the fire of 1174 that the style was first fairly tried. The architect who superintended that work for the first five years was William of Sens; and the details and all the arrangements are so essentially French, and so different from anything else of the same age in England, that his influence on the style of the building can hardly be doubted. Of course it is not meant to assert that no earlier specimens exist; indeed, we can scarcely suppose that they did not, when we recollect that the *pointed arch* was used currently in France for more than a century before this time, and that the *pointed style* was inaugurated at St. Denis at least thirty years before. Still this is probably the first instance of the style being carried out in anything like completeness, not only in the pier arches and openings, but in the vaults also, which is far more characteristic.



588. Five Sisters, York. (From Britton.)

Even after this date the struggle was long, and the innovation most unwillingly received by the English, so that even down to the year 1200 the round arch was currently employed, in conjunction with the pointed, to which it at last gave way, and was then for three centuries banished entirely from English architecture.

Be this as it may, in their treatment of tracery, which followed immediately on the introduction of the pointed arch, the English architects showed considerable originality in design, though inspired by the same sobriety which characterises all their works. It cannot be said that they invented the lancet form of window, numberless examples of small windows with pointed heads existing on the Continent; but they did invent what may be called the lancet style of fenestration. Nowhere on the Continent are such combinations to be found as the Five Sisters at York (Woodcut No. 588), or the east end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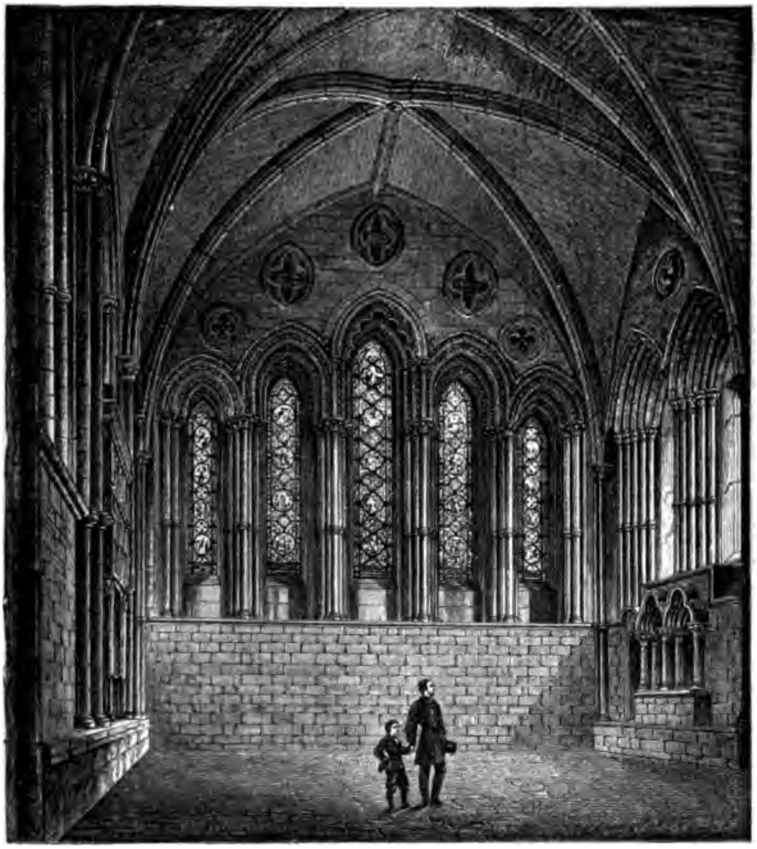
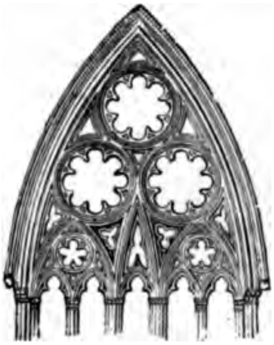
589. Ely Cathedral, East End. (Cath. Ills.)

of Ely (Woodcut No. 589), or such a group as that which terminates the east end of Hereford (Woodcut No. 590). Tracery it can hardly be called, but it is as essentially one design as any of the great east windows that afterwards came into fashion; and until painted glass became all-important, such an arrangement was constructively better than a screen of mullions, and as used in this country is capable of very beautiful combinations.

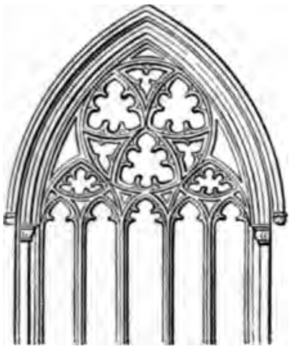


590. Lancet Window, Hereford Cathedral. (Cath. Hb.)

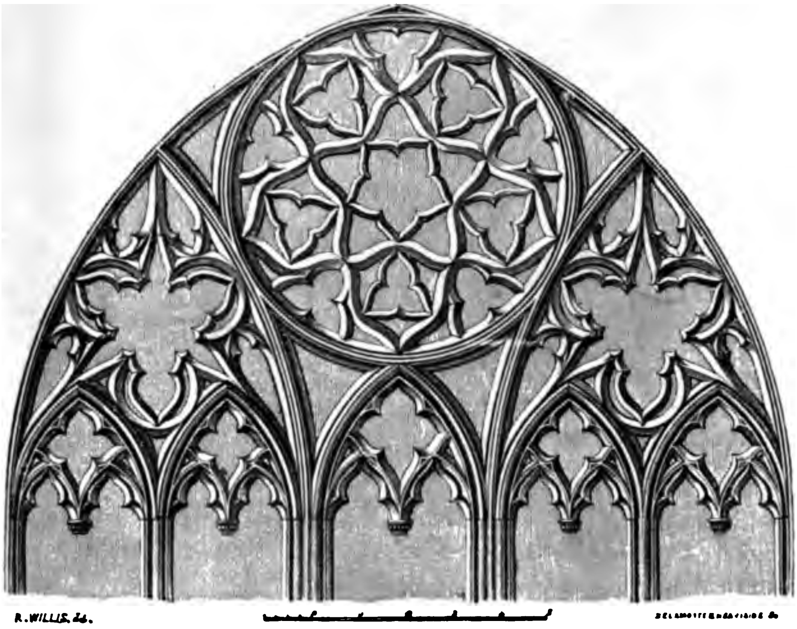
So, at least, the English architects of the 13th century seem to have thought, for they continued to practise their lancet style, as in the much-quoted example of Salisbury Cathedral, long after the French had perfected the geometric forms; which may be seen from the contemporary cathedral in Amiens. In France, as was pointed out in a previous chapter (vol. i. p. 565 *et seq.*), we can trace every step by which the geometric forms were invented. In England this cannot be done, and when we do find a rudimentary combination of two lancets the Edwardian period there prevailed a restless desire for new inventions, and an amount of intellectual activity applied to architecture which nothing could resist; so that these beautiful geometric forms in their turn were forced to give way after being employed for little



593. Window in Chapter-house at York.



English Geometric Tracery.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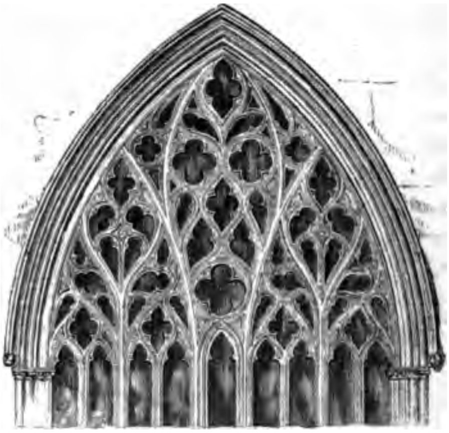
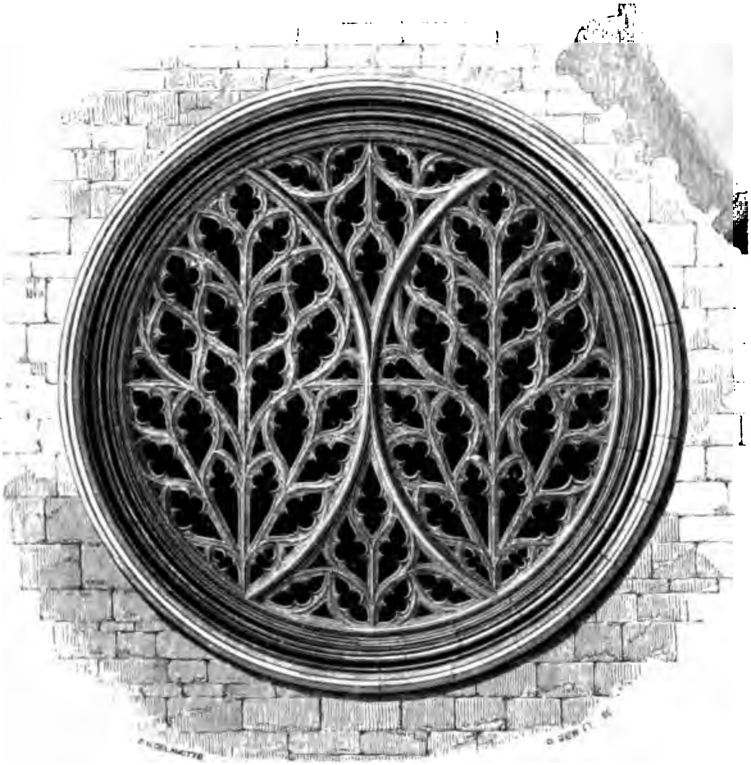
594. Window in St. Anselm's Chapel, Canterbury.

more than half a century, and were superseded by the fashion of flowing tracery, which lasted, however, for even a shorter period than the style which preceded it. This time the invention seems to have been English; for though we cannot feel quite certain when the first specimen of flowing tracery was introduced in France, the Flamboyant style was adopted by the French only after the English wars, whereas the Perpendicular style had superseded this and all other Decorated forms in England before the death of Edward III.

During the time that flowing forms were used in England they gave rise to some of the most beautiful creations in window tracery that are anywhere to be found. The east window at Carlisle (Woodcut No. 595) is one of the finest examples, and illustrates the peculiarity of the style as adopted in this country. Though the forms are flowing, and consequently, as lithic forms, weak, the parts are so exquisitely

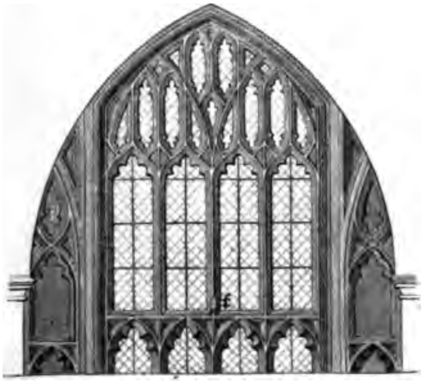


595. East Window, Carlisle Cathedral. (From a Drawing by R. W. Billings.)



596. South Transept Window, Lincoln Cathedral. (Cath. Hb.)

balanced by the stronger ribs introduced and by the arrangement of the whole, that, so far from any weakness being felt, the whole is quite as stable as the purposes to which it is applied would seem to require. Another equally constructive and equally beautiful example is the south transept window at Lincoln (Woodcut No. 596), where the segmental lines introduced give the strength required. Though almost all its lines are flowing, it looks stronger and more constructively correct than the north transept window (Woodcut No. 592), which is wholly made up of circular forms, and is in itself one of the best examples of the earlier form of English geometric tracery. Circular windows were not, however, the forte of English architects; they very rarely used them in their west fronts, not always in their transepts, and generally indeed may be said to have preferred the ordinary pointed forms, in which, as in most matters, they probably exercised a wise discretion.


597. Perpendicular Tracery, Winchester Cathedral.

It may not be quite clear whether William of Wykeham (1366-1404) invented perpendicular tracery, but certain it is that the admiration excited by his works in this style at Winchester, Oxford, and elsewhere, gave a death-blow to the Decorated forms previously in fashion. Although every lover of true art must regret the change, there was a great deal to be said in favour of the new style. It was pre eminently constructive and reasonable. Nothing in a masonic point of view could be better than the straight lines running through from bottom to top of the window, strengthened by transoms when requisite for support, and doubled in the upper division. The ornaments, too, were all appropriate, and, externally at least, the whole harmonised perfectly with the lines of the building. Internally, the architects were more studious to prepare forms suitable by their dimensions and arrangements for the display of painted glass, than to spend much thought on the form of the frames themselves. The poetry of tracery was gone, but it was not only in this respect that we miss the poetic feeling of earlier days. The mason was gradually taking the guidance of the work out of the hands of the educated classes, and applying the square and the rule to replace the poetic inspirations of enthusiasts and the delicate imaginings by which they were expressed.

It is curious to observe how different the course of events was in

France. While Saxon common sense was gradually coming to the surface in this country and curbing every fancy for which a good economic reason could not be given, the Celtic fancy of our neighbours broke loose in all the playful vagaries of the Flamboyant style. Their tracery became so delicate and so unconstructive that it is a wonder it ever stood, and no wonder that half the windows of that date are now without tracery at all. They were framed, too, with foliage so delicate that it ought to have been executed in metal and never attempted in stone—in wonderful contrast to the plain deep mouldings which surround most of our windows of that period.

External Proportions.

If the sobriety of proportion which characterised the design of English architects led to satisfactory results internally, its influence was still more favourable on the external appearance of their churches. An English cathedral is always a part of a great group of buildings—the most important and most dignified part, it is true, but always coinciding and harmonising with its chapter-house, its cloister and conventual buildings, its bishop's palace or abbot's lodging. In France the cathedral is generally like a giant among pigmies—nothing can exist in its neighbourhood. The town itself is dwarfed by the immense incubus that stands in its centre, and in almost no instance can the subordinate buildings be said to form part of the same design—both consequently suffering from their quasi-accidental juxtaposition.

This effect is even more apparent when we come to examine the sky-line of the buildings. Their moderate internal dimensions enabled the English architects to keep the roofs low so as to give full effect to the height of the towers, and to project their transepts so boldly as to vary in perspective the long lines of the roofs from whatever point the building was viewed. Their greatest gain, however, was that they were able to place their tallest and most important feature in the centre of their buildings, and so to give a unity and harmony to the whole design which is generally wanting in Continental examples. One of the few cases in which this feature is successfully carried out in France is the church of St. Sernin at Toulouse (Woodcut No. 344), but there the body of the building is low and long like the English type, and a tower of the same height as those of the façade at Amiens suffices to give dignity to the whole. That church, however, wants the western towers to complete the composition. In this respect it is the reverse of what generally happens in French cathedrals, where the western façades are rich and beautifully proportioned in themselves, but too often overpowered by the building in the rear, and unsupported by any central object. In

Germany they took their revenge, and in many instances kill the building to which they are attached. In England the group of three towers or spires—the typical arrangement of our architects—was always pleasing, and very frequently surpasses in grace and appropriateness anything to be found on the Continent. Even when, as at Norwich or at Chichester, the spire is unsupported by any western towers, the same effect of dignity is produced as at Toulouse; the design is pyramidal, and from whatever point it is viewed it is felt to be well balanced, which is seldom the case when the greatest elevation is at one end.

598. Salisbury Cathedral, from the N.E.

The cathedral at Salisbury (Woodcut No. 598), though, like the two last named, it has no western towers, still possesses so noble a spire in the centre, and two transepts so boldly projecting, that when viewed from any point east of the great transept it displays one of the best-proportioned and at the same time most poetic designs of the Middle Ages. It is quite true that the spire is an afterthought of the 14th century, and that those who added it ought to have completed the design by erecting also two western towers, but, like St. Sernin's, it is complete as it is, and very beautiful. The flèche at Amiens is 20 ft. higher than the spire at Salisbury, being 424 ft. as against

599. View of Lichfield Cathedral. (From Britton's 'Cathedral Antiquities.')

Yet the Salisbury spire is among the most imposing objects of which Gothic architecture can boast, the other an insignificant pinnacle that hardly suffices to relieve the monotony of the roof on which it is placed.

Lichfield (Woodcut No. 599), though one of the smallest of English cathedrals, is one of the most pleasing from having all its three spires complete, and in the proportion originally designed for the building and for each other. The height of the nave internally is only 58 ft., and of the roof externally only 80 ft.; yet with these diminutive dimensions great dignity is obtained and great beauty of composition, certainly at less than one-fourth the expenditure in materials and money it would have cost to produce a like effect among the tall, heavy-roofed cathedrals of the Continent.

Had the octagon at Ely been completed externally,[1] even in wood, it would probably have been superior to the spire at Salisbury both in height and design. As before mentioned, it was left with only a temporary lantern externally, and, as was always the case in England, no drawings—no written specifications of the designer have been left. The masons on the Continent were careful to preserve the drawings of unfinished parts of their designs. The gentlemen architects of England seem to have trusted to inspiration to enable them to mould their forms into beauty as they proceeded. With true Gothic feeling they believed in progress, and it never occurred to them but that their successors would surpass them in their art, in the manner they felt they were excelling those who preceded them.

The three-towered cathedrals are not less beautiful and characteristic of England than those with three spires. Nothing can exceed the beauty of the outline of Lincoln as it stands on its cliff looking over the Fens (Woodcut No. 600); though the erection of a screen in front of the western towers cuts them off from the ground, and so far mars their effect when seen close at hand. York perhaps possesses the best façade of the class in England, both as regards proportion and detail. The height of the towers to the top of the pinnacles is under two hundred feet (196), but this is quite sufficient for the nave they terminate, or the central tower with which they group. At Amiens the western towers are respectively 224 and 205 ft. in height, but they are utterly lost under the roof of the cathedral, and fail to give any dignity to the design.

For poetry of design and beauty of proportion, both in itself and the building of which it forms a part, perhaps the Angel Tower at

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[1] [illegible] chance of trying the effect [illegible] a few years ago, when it [illegible] to restore the lantern, as a [illegible] Peacock. In a fit of purism, only the ugly temporary arrangement was made new. It looked venerable before the recent repairs; now that it is quite new again, it is most unpleasing.

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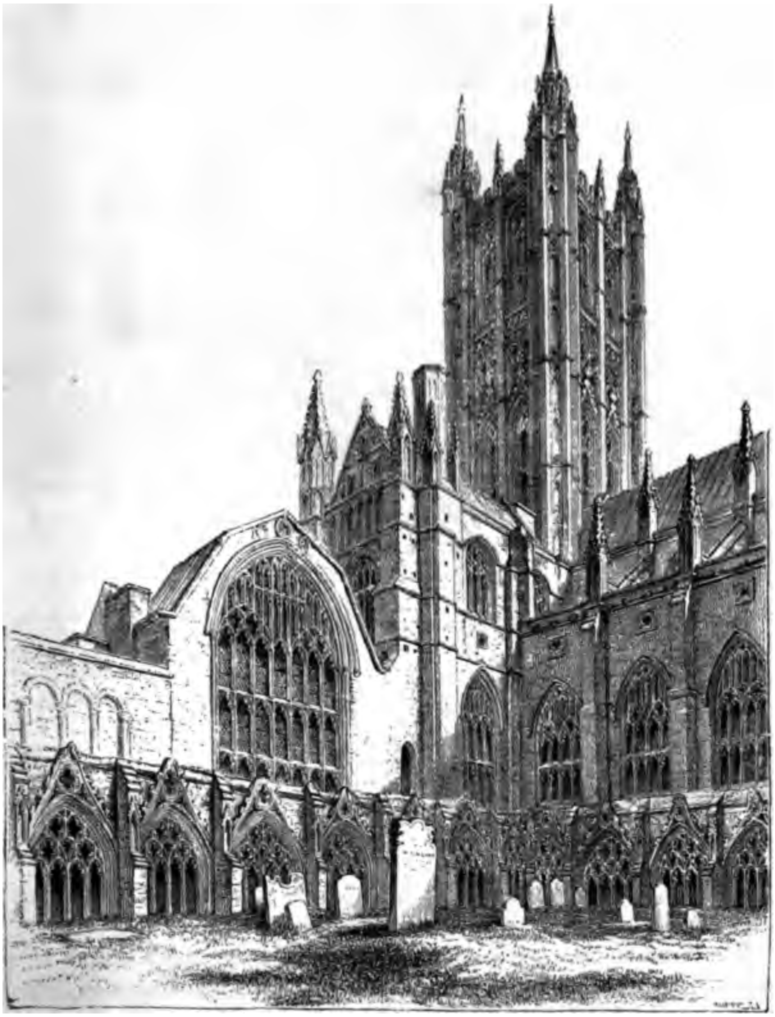
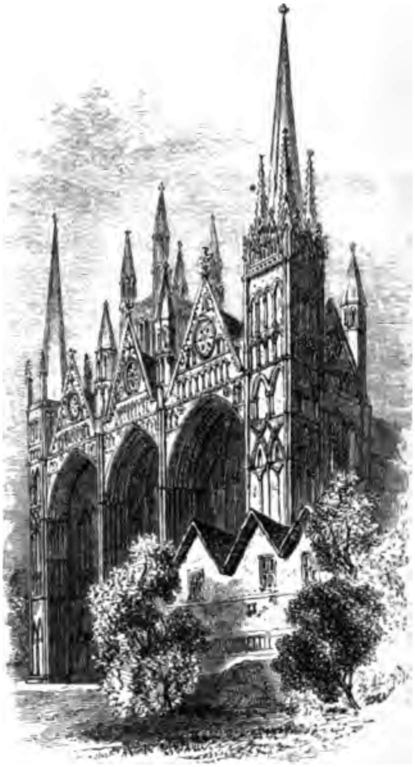
alone has a façade at once original and beautiful. Nothing but the portico of a classic temple can surpass the majesty of the three great arches of the façade of this church. The effect is a little marred by the chapel thrust in between the central piers; but, take it all in all it is one of the most beautiful inventions of the Middle Ages.



601. View of the Angel Tower and Chapter-House, Canterbury. (Cath. Hb.)

Such a screen would have been better had the arches been flanked by two more important towers than those which now adorn that façade, but unless the piers of the central tower were sufficient to carry a much more important feature in the centre, the architects showed only their usual discretion in refusing to dwarf the rest of the cathedral by an exaggerated façade.

It may sound like the indulgence of national predilection to say so; but it does seem that the English architects seized the true doctrine of proportion to a greater extent than their contemporaries on the Continent, and applied it more successfully. It will be easily understood that in so complicated and constructive a machine as a Gothic cathedral, unless every part is in proportion the whole will not unite. It is as if, in a watch or any delicate piece of machinery, one wheel or one part were made stronger or larger in proportion to all the rest. It may be quite true that it would be better if all were as strong or as large as this one part; but perfection in all the arts is attained only by balance and proportion. Whenever any one part gets too large for the rest the harmony is destroyed. This the English architects perfectly understood. They kept their cathedrals narrow, that they might appear long; they kept them low, that they might not appear too narrow. They broke up the length with transepts, that it might not fatigue by monotony. Externally they kept their roofs low that with little expenditure they might obtain a varied and dignified sky-line, and they balanced every part against every other so as to get the greatest value out of each without interfering with the whole. A Gothic cathedral, however, is so complicated—there are so many parts and so many things to think of—that none can be said to be perfect. A pyramid may be so, or a tower, or a Greek temple, or any very simple form of building, whatever its size; but a Gothic cathedral hardly can be made so—at least has not yet, though



602. West Front of Peterborough Cathedral. (From Britton's 'Picturesque Antiquities.')

perhaps it might now be; but in the meanwhile the English, considering the limited dimensions of their buildings, seem to have approached a perfect ideal more nearly than any other nation during the Middle Ages.

DIVERSITY OF STYLE.

There is still another consideration which must not be lost sight of in attempting to estimate the relative merit of Continental and English cathedrals; which is, the extraordinary diversity of style which generally prevails in the same building in this country as compared with those abroad. All the great French cathedrals—such as Paris, Rheims, Chartres, Bruges, and Amiens—are singularly uniform throughout. Internally it requires a very keen perception of style to appreciate the difference, and externally the variations are generally in the towers, or in unessential adjuncts which hardly interfere with the general design. In this country we have scarcely a cathedral, except Salisbury, of which this can be said. It is true that Norwich is tolerably uniform in plan and in the detail of its walls up to a certain height; but the whole of the vaulting is of the 15th century, and the windows are all filled with tracery of the same date. At Ely, a Norman nave leads up to the octagon and choir of the 14th century, and we then pass on to the presbytery of the 13th. At Canterbury and Winchester the anomalies are still greater; and at Gloucester, owing to the perpendicular tracery being spread over the Norman skeleton, they become absolutely bewildering.

In some, as Wells or York, it must be confessed the increase in richness from the western entrance to Lady Chapel is appropriate, and adds to the effect of the church more than if the whole were uniform throughout. This is particularly felt at Lincoln, where the simplicity of the early English nave and choir blossoms at last into the chaste beauty of the Angel Choir at the east end. It follows so immediately after the rest as not to produce any want of harmony, while it gives such a degree of enrichment as is suitable to the sanctity of the altar and the localities which surround it.

Even, however, when this is not the case, the historical interest attaching to these examples of the different ages of English architecture goes far to compensate for the want of architectural symmetry, and in this respect the English cathedrals excel all others. That history which on the Continent must be learnt from the examination of fifty different examples, may frequently be found in England written complete in a single cathedral. The difficulty is to discriminate how much of the feeling thus excited is due to Archæology, and how much to Architecture. In so far as the last-named art is concerned, it must probably be confessed that our churches do suffer from the various changes they have undergone, which, when architecture alone is considered, frequently turn the balance against them when compared with their Continental rivals.

SITUATION.

Whatever conclusion may be arrived at with regard to some of the points mooted in the above section, there can be no doubt that in beauty of situation and pleasing arrangement of the entourage the English cathedrals surpass all others. On the Continent the cathedral is generally situated in the market-place, and frequently encumbered by shops and domestic buildings, not stuck up against it in barbarous times, but either contemporary, or generally at least Mediæval; and their great abbeys are frequently situated in towns, or in localities possessing no particular beauty of feature. In England this is seldom or never the case. The cathedral was always surrounded by a close of sufficient extent to afford a lawn of turf and a grove of trees. Even in the worst times of Anne and the Georges, when men chiselled away the most exquisite Gothic canopies to set up wooden classical altar-screens, they spared the trees and cherished the grass; and it is to this that our cathedrals owe half their charm. There can be no greater mistake than to suppose that the architect's mission ceases with heaping stone on stone, or arranging interiors for convenience and effect. The situation is the first thing he should study; the arrangement of the accessories, though the last, is still amongst the most important of his duties.

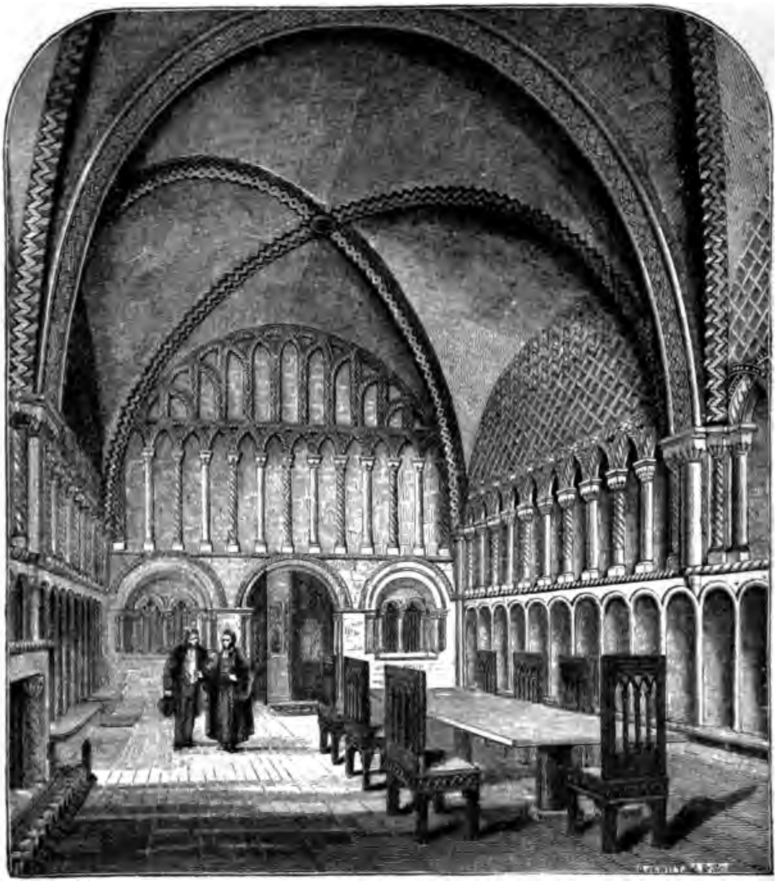
Durham owes half its charm to its situation, and Lincoln much of its grandeur. Without its park the cathedral at Ely would lose much of its beauty; and Wells, lying in its well wooded and watered vale, forms a picture which may challenge comparison with anything of its class. Even when situated in towns, as Canterbury, Winchester, or Gloucester, a sufficient space is left for a little greenery and to keep off the hum and movement of the busy world. York, among our great cathedrals, is about the most unfortunate in this respect, and suffers accordingly. But in order to appreciate how essentially the love of Nature mingled with the taste for architectural beauty during the Middle Ages, it is necessary to visit some of the ruined abbeys whose ruins still sanctify the green valleys or the banks of placid streams in every corner of England.

Even if it should be decided that in some respects the architects of England must yield the palm to those of the Continent as regards the mechanical perfection of their designs, it must at least be conceded, that in combining the beauties of Art with those of Nature they were unrivalled. Their buildings are always well fitted to the position in which they are placed. The subsidiary edifices are always properly subordinated, never too crowded nor too widely spaced, and always allowing when possible for a considerable admixture of natural objects. Too frequently in modern times—even in England—this has been neglected; but it is one of the most important functions of the architect, and the means by which in many instances most agreeable effects have been produced.

CHAPTER-HOUSES.

The chapter-house is too important and too beautiful an adjunct to be passed over in any sketch, however slight, of English architecture. It also is almost exclusively national. There are, it is true, some "Salles Capitulaires" attached to Continental cathedrals or conventual establishments, but they are little more than large vestry-rooms, with none of that dignity or special ordinance that belongs to the English examples. One cause of the small importance attached to this feature on the Continent was that, in the original basilica, the apse was the assembly-place, where the bishop sat in the centre of his clergy and regulated the affairs of the church. In Italy this arrangement continued till late in the Middle Ages. In France it never seems to have had any real existence, though figuratively it always prevailed. In England we find the Bishop's throne still existing in the choir at Norwich; and at Canterbury, and doubtless in all the apsidal Norman cathedrals, this form of consistory originally existed. Such an arrangement was well suited for the delivery of an allocution or pastoral address by the bishop to his clergy, and was all that was required in a despotic hierarchy like the French Church; but it was by no means in accordance with the Anglo-Saxon idea of a deliberative assembly which should discuss every question as a necessary preliminary to its being promulgated as a law.

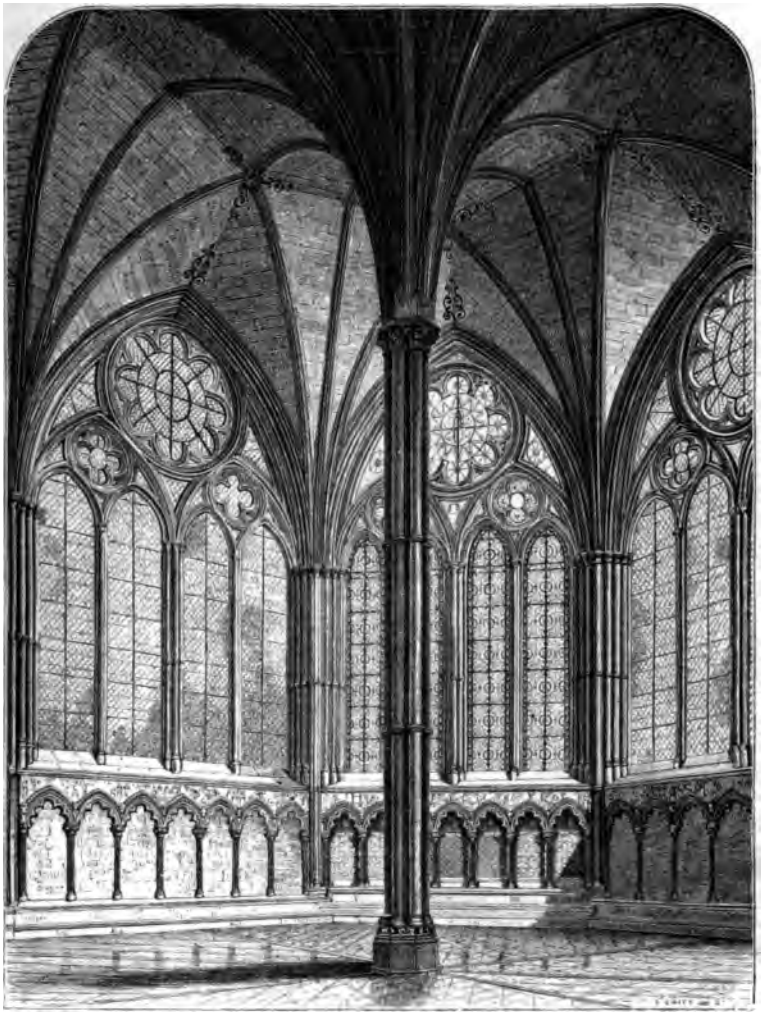
In consequence of this, we find in England chapter-houses attached to cathedrals even in early Norman times. These were generally rectangular rooms, 25 or 30 ft. wide by about twice that extent in length. We can still trace their form at Canterbury and Winchester. They exist at Gloucester and Bristol and elsewhere. So convenient and appropriate does this original form appear, that it is difficult to understand why it was abandoned, unless it was that the resonance was intolerable. The earliest innovation seems to have been at Durham, where, in 1133, a chapter-house was commenced with its inner end semicircular; but shortly after this, at Worcester, a circular chamber with a central pillar was erected, and the design was so much approved of, that it became the typical form of the English chapter-house ever afterwards. Next, apparently, in date came Lincoln, and shortly afterwards the two beautiful edifices at Westminster and Salisbury. The former, commenced about the year 1250, became, without any apparent incongruity, the parliament-house of the nation, instead of the council-chamber of a monastic establishment; and all the parliaments of the kingdom were held within its walls till the dissolution of the religious orders placed the more convenient rectangular chapel of St. Stephen at their disposal. Now that it has been restored, we are enabled to judge of the beauty of its proportions; and, from the remains of paintings which have been so wonderfully preserved, of the beauty of the art with which it was once decorated. It only wants coloured glass in its windows to enable us to realise the beauty of these truly English edifices.



603. Chapter-House, Bristol. (Cath. Hb.)

That at Bristol is late in the style (1155-1170), and consequently almost approaches the transitional epoch, but is very rich and beautiful. The eastern end has been unfortunately pulled down and rebuilt, but the western end, shown in the annexed Woodcut (No. 603), is one of the richest and best specimens of late Norman work to be found anywhere.

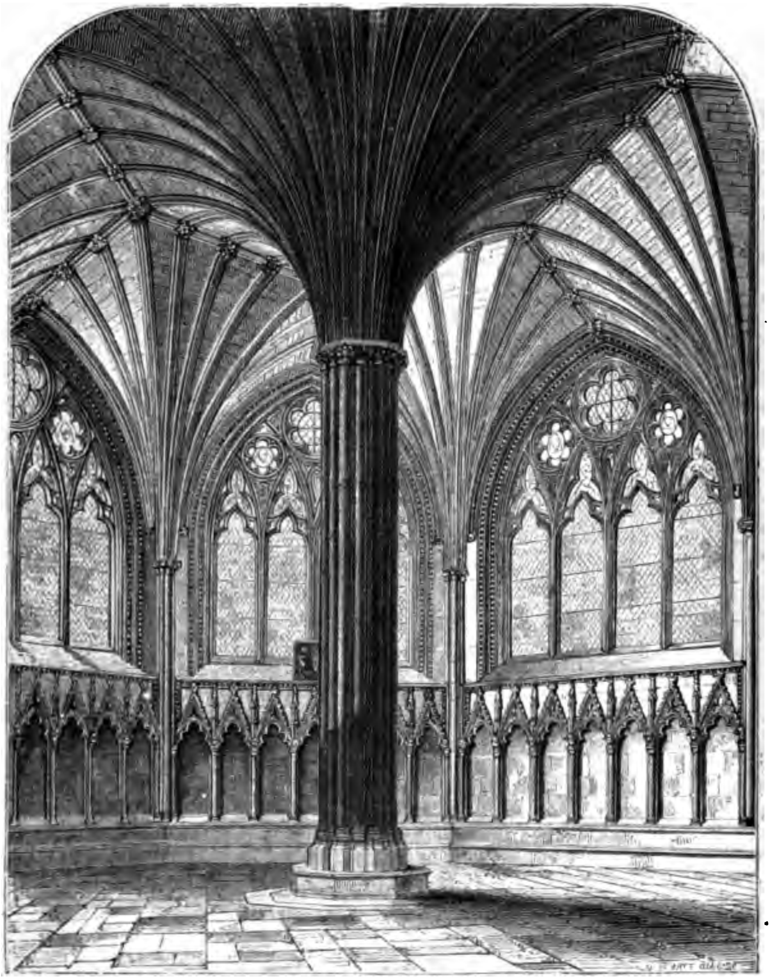
But, having once got rid of the central pillar, which was the great defect of their construction as halls of assembly, they would hardly



604. Chapter-House, Salisbury. (Cath. Hb.)

have reverted to it again, and a true Gothic dome might have been the result had the style been continued long enough to admit of its being perfected.

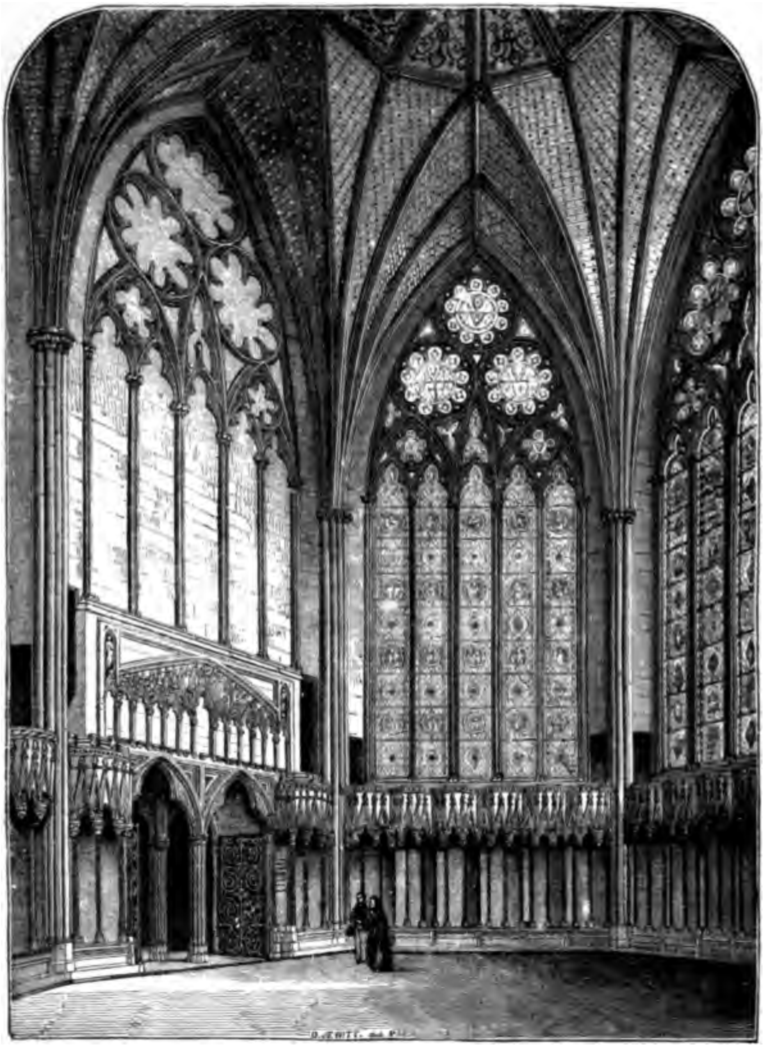
Salisbury chapter-house (Woodcut No. 604) was erected shortly afterwards; and, though its original beauties have been to a great extent washed out by modern restorations, it still affords a very perfect type of an English chapter-house of the 13th century, at a time when the French geometric tracery was most in vogue. That at Wells (1293-1302, Woodcut No. 605), however, is more beautiful and more



605. Chapter-House, Wells. (Cath. Hb.)

essentially English in all its details. The tracery of the windows, the stalls below them, and the ornaments of the roof, are all of that perfect type which prevailed in this country about the year 1300. Its central pillar may perhaps be considered a little too massive for the utilitarian purpose of the building, but as an architectural feature its proportions are perfect. Still the existence of the pillar was a defect that it was thought expedient to remove, if possible; and it was at last accomplished in the chapter-house at York, the most perfect example of the class existing, as its boasting inscription testifies,—

> "Ut Rosa flos florum,
> Sic Domus ista Domorum."


O. JEWITT. del. Sc.

606. Chapter-House, York. (Cath. Hb.)

Like all the rest of them, its diameter is 57 or 58 ft.—as has been suggested, an octagon inscribed in a circle of 60 ft. diameter. In this instance alone has a perfect Gothic dome been accomplished. It is 12 ft. less in diameter than the lantern at Ely, and much less in height; but it is extremely beautiful both in design and detail, and makes us regret more and more that, having gone so far, the Gothic architects did not follow out this invention to its legitimate conclusion.

By the time, however, that York chapter-house was complete, all the great cathedrals and monastic establishments had been provided with this indispensable adjunct to their ecclesiastical arrangements, and none were erected either in the Lancastrian or Tudor periods of the art, so that we can hardly guess what might have been done had a monastic parliament-house been attempted at a later date.[1]

Chapels.[2]

Although not so strictly peculiar, the forms of English chapels were so original and offer so many points of interest that they are well worthy of study.

There is perhaps no example of a Norman chapel now existing, unless the remains of the infirmary chapels at Canterbury and Ely may be considered as such. The practice of erecting them seems to have arisen with our educational colleges, where all those present took part in the service, and the public were practically excluded. One of the finest and earliest of these is that of Merton College, Oxford. It has, and was always designed to have, a wooden roof; but of what fashion is not quite clear, except that it certainly could never have been like the one now existing.

The typical specimen of that age, however, was the royal chapel of St. Stephen at Westminster, which, from what remained of it till after the Great Fire, we know must have been the most exquisitely beautiful specimen of English art left us by the Middle Ages.[3]

It was 92 ft. long by 33 ft. wide internally, and 42 ft. high to the springing of the roof. This was of wood, supported by hammer-beam trusses similar to, but evidently more delicate in design and more elegantly carved than those of Westminster Hall, which were apparently copied from those of the chapel. The proportions were beautiful; but the greatest charm was in its details, which were carried out evidently by the best artists, and with all the care that was required in the principal residence of the sovereign.

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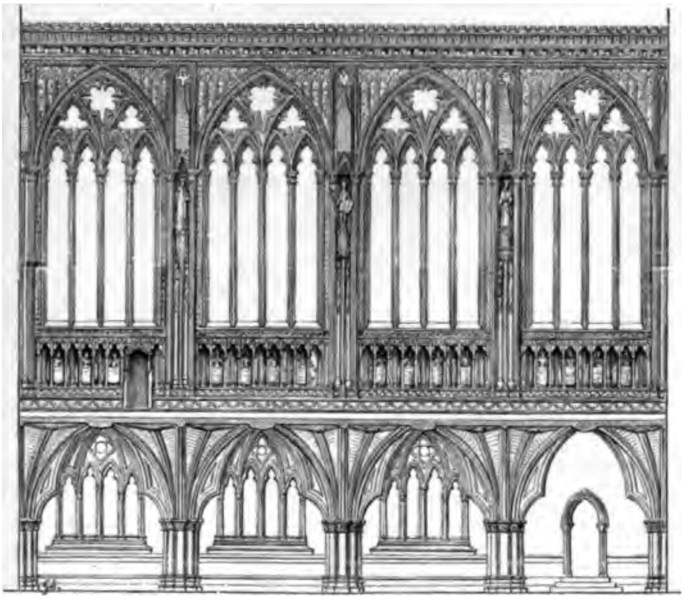
[1] The central octagon of the Parliament Houses is 65 ft. in diameter, and is the best specimen of a modern Gothic dome which has been attempted.

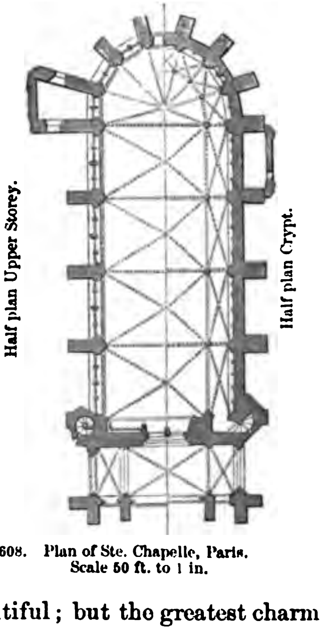
[2] A chapel, properly speaking, is a hall designed for worship, without any separation between classes. A church has a chancel for the clergy, a nave for the laity. A cathedral has these and attached chapels and numerous adjuncts which do not properly belong to either of the other two.

[3] Few things of its class are more to be regretted than the destruction of this beautiful relic in rebuilding the Parliament Houses. It would have been cheaper to restore it, and infinitely more beautiful when restored than the present gallery which takes its place. It is sad, too, to think that nothing has been done to reproduce its beauties. When the colleges of Exeter at Oxford, or St. John's, Cambridge, were rebuilding their chapels, it would have been infinitely better to reproduce this exquisite specimen of English art than the models of French chapels which have been adopted.

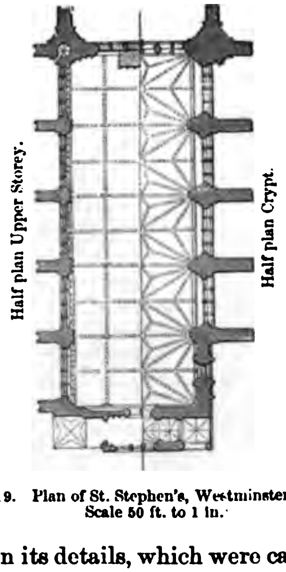
The work on St. Stephen's Chapel, published for the Woods and Forests by Mr. Mackenzie is rendered useless by the addition of an upper storey which never existed.



607. Internal Elevation of St. Stephen's Chapel, Westminster.



608. Plan of Ste. Chapelle, Paris.
Scale 50 ft. to 1 in.



609. Plan of St. Stephen's, Westminster.
Scale 50 ft. to 1 in.

Though nearly a century later in date,[1] St. Stephen's Chapel is so nearly a counterpart of the royal chapel at Paris—"the Sainte Chapelle"—that it may be worth while to pause a second to compare the two. In dimensions, on plan, they are not dissimilar; both are raised on an under-croft or crypt of great beauty. The French example has the usual apsidal termination; the English the equally characteristic square east end. The French roof is higher and vaulted; the English was lower and of wood. It is impossible to deny that the French chapel is very beautiful, and only wants increased dimensions to merit the title of a sublime specimen of Gothic art; but the English example was far more elegant. All the parts are better balanced, and altogether it was a far more satisfactory example than its more ambitious rival, of the highest qualities to which the art of the Middle Ages could attain.

We have an excellent means of ascertaining how far St. Stephen's Chapel would have been damaged by a vaulted roof, by comparing it with the nearly contemporary chapel at Ely (1321–1349), erected under the superintendence of the same Alan de Walsingham who designed the octagon of the church. Its internal dimensions are 100 ft. long by 43 wide, and sixty high. The details of the screen of niches which form a dado round the whole chapel are perhaps, without exception, the most exquisite specimens of decorative carving that survive from the Middle Ages. The details of the side windows are also good, but the end windows are bad in design, and neither externally nor internally fit the spaces in which they are placed. With painted glass this might be remedied, internally at least; but the whole design is thrown out of harmony by its stone roof. As a vault its width is too great for its length; the height insufficient for its other dimensions; and altogether, though its details are beyond all praise, it leaves a more unsatisfactory impression on the mind than almost any other building of its class.

King's College Chapel at Cambridge (1479-1515) errs in exactly the opposite direction. It is too long for its width, but has height sufficient to redeem the length, though at the expense of exaggerating its narrowness. These, however, are all errors in the direction of sublimity of effect; and though greater balance would have been more satisfactory, the chapel is internally so beautiful that it is impossible not to overlook them. It is more sublime than the Sainte Chapelle, though, from its late age, wanting the beauty of detail of that building.

Henry VII.'s Chapel, Westminster, (1502–1515) differs from all previous examples, in having side-aisles with chapels at the east end and a clerestory. Its proportions are not, however, pleasing, but it makes up in richness of detail for any defects of design.

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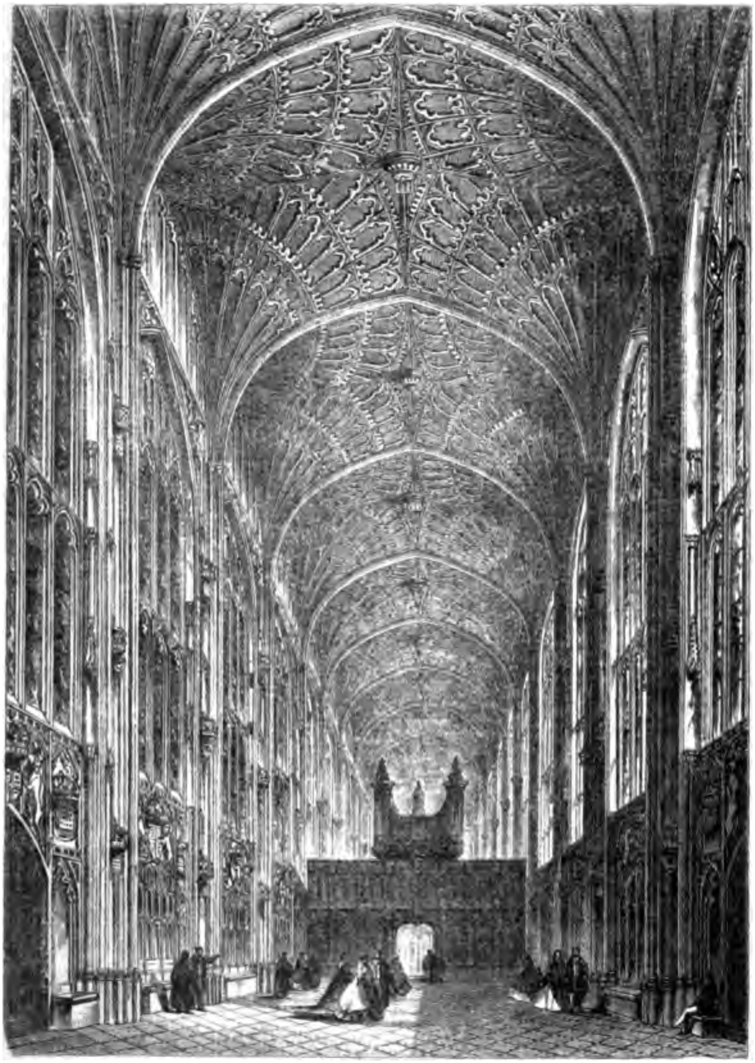
[1] The Sainte Chapelle was commenced 1244, and finished 1248. The works of St. Stephen's were commenced apparently 1292, but were not finished till 1348.

Of the three royal chapels, that at Windsor (1475–1521) is perhaps on the whole the most satisfactory. Being a chapel it has no western or central towers to break its sky-line and give it external dignity; but internally it is a small cathedral, and, notwithstanding the lateness of some of its details (part of the vault was finished in the reign of Henry VIII.), is so elegant and so appropriate in every part as to be



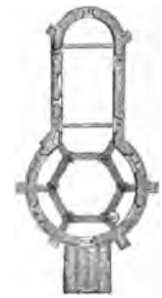
640 Interior View of King's College Chapel, Cambridge.

certainly one of the most beautiful Gothic buildings in existence; for its size, perhaps the most beautiful. Considering that these three last-named chapels were being erected contemporaneously with St. Peter's at Rome, it is wonderful how little trace of classic feeling they betray; and how completely not only Gothic details but true Gothic feeling still prevailed in this country almost up to the outbreak of the Reformation.

Parish Churches.

Were it possible in a work like this to attempt anything approaching an exhaustive enumeration of the various objects of interest produced during the Middle Ages, it would be impossible to escape a very long chapter on the parish churches of England. They are not so magnificent as her cathedrals, nor so rich as her chapels; but for beauty of detail and appropriateness of design they are unsurpassed by either, while on the Continent there is nothing to compare with them. The parochial system seems to have been more firmly rooted in the affection of the people of this country than of any other. Especially in the 14th and 15th centuries the parishioners took great pride in their churches, and those then erected are consequently more numerous as well as more ornamental than at any other time.

Strange to say, considering how common the circular form was in the countries from which our forefathers are said to have emigrated, it never took root in England. The round churches at Cambridge, Northampton, and London, were certainly sepulchral, or erected in imitation of the church at Jerusalem. The one known example of a village church with a circular nave is that at Little Maplestead, in Essex. It is of the pure German or Scandinavian type[1]—a little St. Gereon, standing alone in this form in England; but a curious modification of it occurs in the eastern counties, in which this church is situated, which points very distinctly to the origin of a great deal of the architecture of that country. There are in Norfolk and Suffolk some forty or fifty churches with round western towers, which seem undoubtedly to be mere modifications of the western round nave of the Scandinavian churches. At page 115, Läderbro Church (Woodcut No. 559) was pointed out as an example of a circular nave attenuated into a steeple, and there are no doubt many others of the same class in Scandinavia. It was, however, in England, where rectangular naves were common, that the compromise found in this country became fashionable. These Norfolk churches with round towers may



611. Plan of Circular Church at Little Maplestead. Scale 50 ft. to 1 in.

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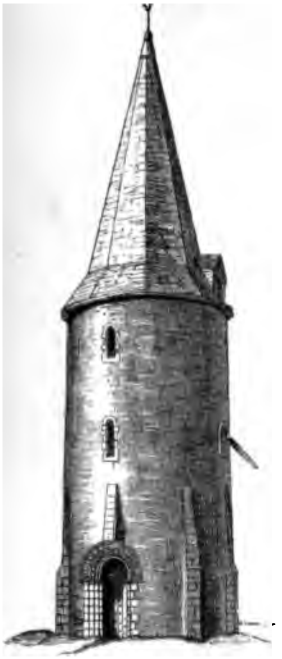
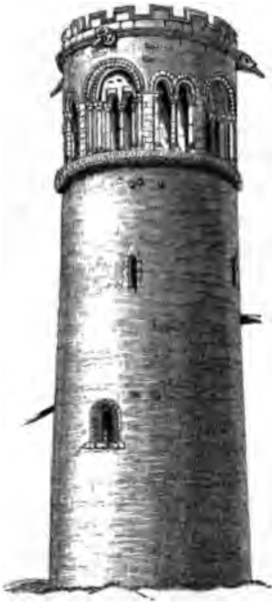
[1] *Vide ante*, p. 53, and p. 99 *et seq.*

consequently be looked upon as safe indexes of the existence of Scandinavian influences in the eastern counties, and also as interesting examples of the mode in which a compromise is frequently hit upon between the feelings of intrusive races and the habits of the previous inhabitants.

It can scarcely be doubted that round-naved and round-towered churches existed in the eastern counties anterior to the Norman Conquest; but if any still remain, they have not been described. The earliest that are known were erected during the Norman period, and extend certainly down to the end of the Edwardian period. Some of the towers have perpendicular details, but these seem insertions, and consequently do not indicate the date of the essential parts of the structure.

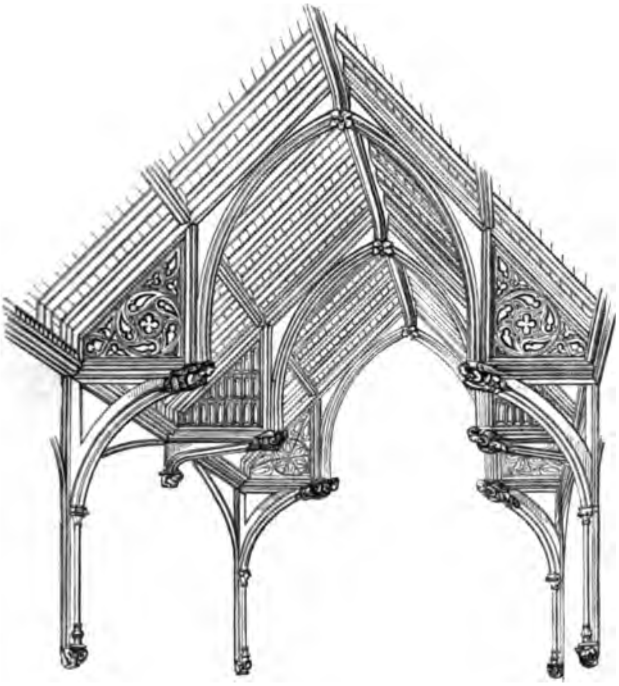


612. Spire of Great Leighs Church, Essex.



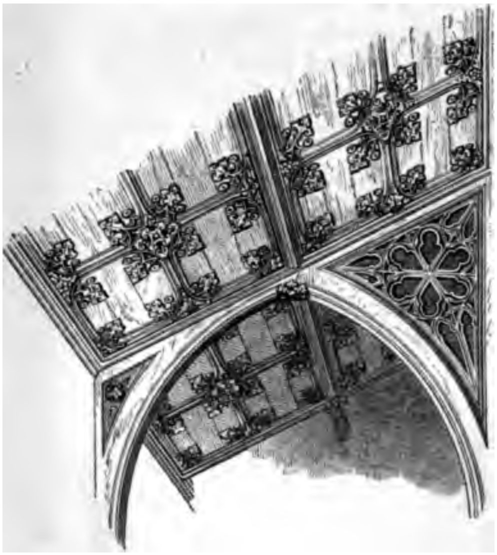
613. Tower of Little Saxham Church, Suffolk.

As a rule, the English parish church is never vaulted, that species of magnificence being reserved, after the Norman times at least, for cathedrals and collegiate churches; but, on the other hand, their wooden roofs are always appropriate, and frequently of great beauty. So essential does the vault appear to have been to Gothic architecture both abroad and in this country, that it is at first sight difficult to admit that any other form of covering can be as beautiful. But some of the roofs in English churches go far to refute the idea. Even, however, if they are not in themselves so monumental and so grand, they had at least this advantage, that the absence of the vault allowed the architect to play with the construction of the substructure. He was enabled to lighten the pillars of the nave to any extent he thought consistent with dignity, and to glaze his clerestory in a manner which must have given extreme brilliancy to the interior when the whole was filled with painted glass. Generally with a wooden roof there were two windows in the clerestory for one in the aisles: with a vaulted roof the tendency was the other way. Had they dared, they would have put one above for two below. But the great merit of a wooden roof was, that it enabled the architect to dispense with all flying buttresses, exaggerated pinnacles, and mechanical expedients, which were necessary to support a vault, but which often sadly hampered and crowded his designs.

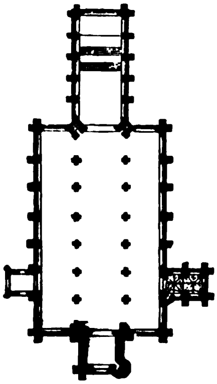


614. Roof at Trunch Church. (From a Drawing by H. Clutton.)

So various were the forms these wooden roofs took that they almost defy classification. The earlier and best type was a reminiscence, rather than an imitation, of the roof of St. Stephen's Chapel or Westminster Hall, but seldom so deeply framed. That at Trunch Church, Norfolk (Woodcut No. 614), may be taken as a fair average specimen of the form adopted for the larger spans, and that at New Walsingham of the mode adopted for roofing aisles. Some, of course, are simpler, but many much more elaborate. In later periods they became flatter, and more like the panelled ceiling of a hall or chamber; but they were always perfectly truthful in construction, and the lead was laid directly on the boarded framing. They thus avoided the double roof, which was so inherent a defect in the vaulted forms, where the stone ceiling required to be protected externally by a true roof.


615. Roof of Aisle in New Walsingham Church.

Among so many examples it is difficult to select one which shall represent the class, but the annexed plan of Walpole St. Peter's, Norfolk, will suffice to explain the typical arrangement of an English parish church. In almost every instance the nave had aisles, and was lighted by a clerestory. The chancel was narrow and deep, without aisles, and with a square termination. There was one tower, with a belfry, generally, but not always, at the west end; and the principal entrance was by a south door, usually covered by a porch of more or less magnificence, frequently, as in this instance, vaulted, and with a muniment room or library chamber over it.


616. Plan of Church of Walpole St. Peter's, Norfolk. Scale 100 ft. to 1 in.

Often, as at Coventry, Boston, and other places, these churches with the above described arrangements almost reached the dimensions of small cathedrals, the towers and spires matching those of the proudest ecclesiastical edifices; and in many instances the details of their tracery and the beauty of their sculptured ornaments are quite equal to anything to be found in the cathedral of the diocese.

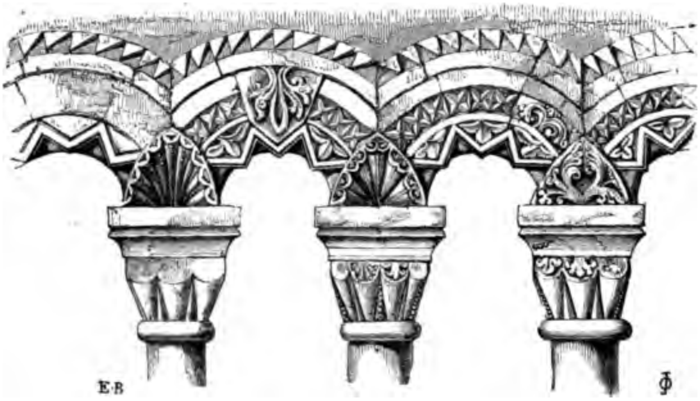
Details.

When we consider the brilliancy of invention displayed in the decorative details of French ecclesiastical buildings, the play of fancy and the delicacy of execution, it must perhaps be admitted that in this respect the French architects of the Middle Ages far excelled those of any other nation. This was, no doubt, due in a great measure to the reminiscences of classical art that remained in the country, especially in the south, where the barbarian influence never really made itself felt, and whence the feeling gradually spread northwards; and may be traced in the quasi-classical details of the best French examples of the 13th century, even in the Isle de France. More also should perhaps be ascribed to the Celtic feeling for art, which still characterises the French nation, and has influenced it ever since its people became builders.

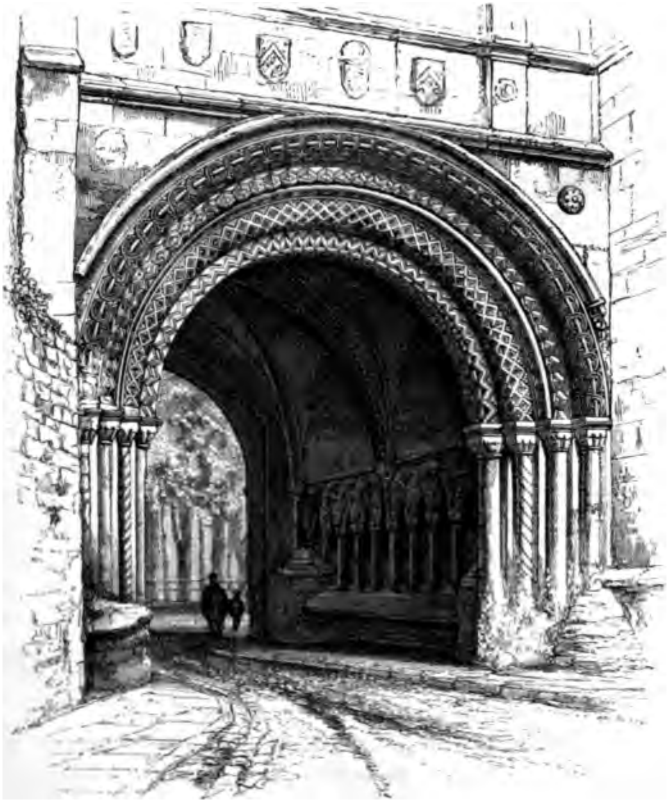
Though the English must yield the palm to the French in this respect, there is still a solidity and appropriateness of purpose in their details which goes far to compensate for any want of fancy. There is also in this country a depth of cutting and a richness of form, arising from the details being so often imitated from wood-carving, which is architecturally more valuable than the more delicate exuberance of French examples.

These remarks apply with almost equal force to figure-sculpture as a mode of decoration. Neither in Germany nor in this country is anything to be found at all comparable with the great sculptured Bibles of Rheims, Chartres, Bruges, and other great cathedrals of France; even such as Poitiers, Arles, St. Gilles, are richer in this respect than many of our largest churches. It is true that the sculptures of the façade at Wells, or of the Angel Choir at Lincoln, are quite equal in merit to anything of the same period on the Continent; and, had there been the same demand, we might have done as well or better than any other nation. Whether it arose from a latent feeling of respect for the Second Commandment, or a cropping out of Saxon feeling, certain it is that figure-sculpture gradually died out in England. In the 14th century it was not essential; in the 15th and 16th it was subordinate to the architectural details, and in this respect the people became Protestant long before they thought of protesting against the pope and the papist form of worship.

As already hinted at, it is probable that a great deal of the richness of English decorative carving is due to the employment, in early times, of wood as a building material in preference to stone. It is difficult, for instance, to understand how such a form of decorative arch as that on the old staircase at Canterbury could have arisen from



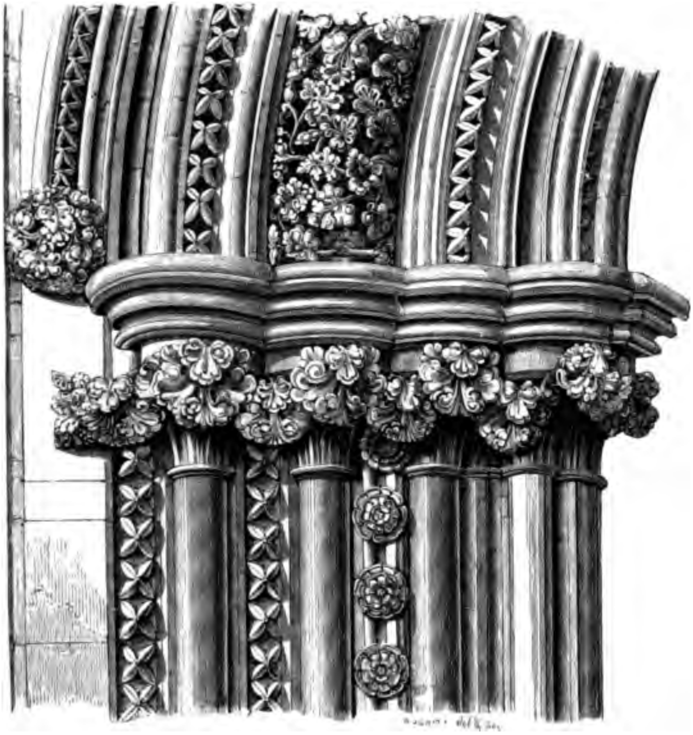
617. Staircase at Canterbury Cathedral.



618 Norman Gateway, College Green, Bristol. (Cath. Hb.)

any exigency of stone construction; but it displays all that freedom of form and richness of carving that might easily arise from the employment of timber.

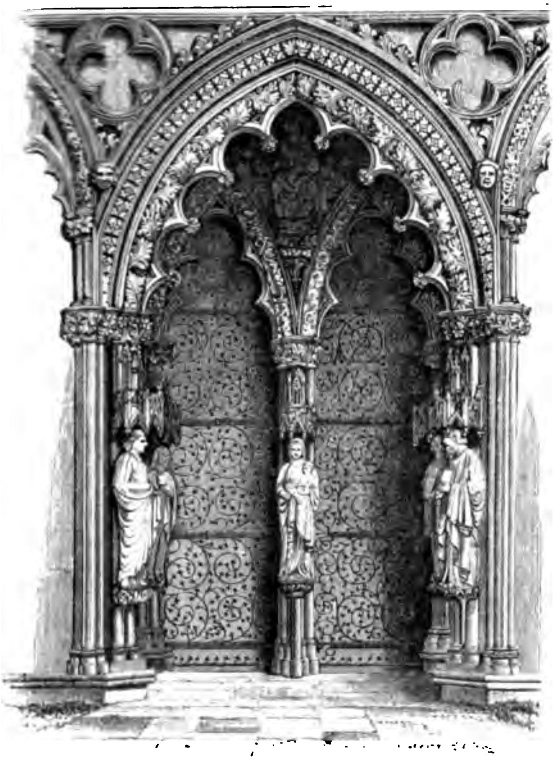
The same remarks apply, though in a less degree, to the Norman gateway at Bristol (Woodcut No. 618); which may be regarded as a typical specimen of the style—sober, and constructive, yet rich—without a vestige of animal life, but with such forms as an ivory or wood carver might easily invent, and would certainly adopt.



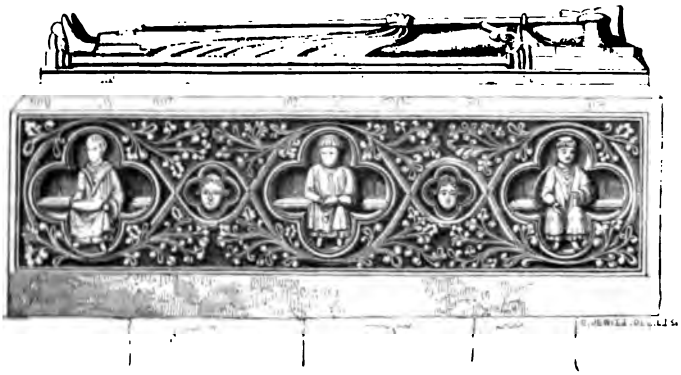
619. Capitals, &c., of Doorway leading to the Choir Aisles, Lincoln. (Cath. Hb.)

The great defect of such a style of decoration as this was its extreme elaboration. It was almost impossible to carry out a large building, every part of which should be worked up to the same key-note as this; and, if it had been done, it would have been felt that the effect was not commensurate with the labour bestowed upon it. What the architects therefore set to work to invent was some mode of decoration which should be effective with a less expenditure of labour. This they soon discovered in the deep-cut mouldings of the Gothic arch, with the occasional intermixture of the dog-tooth moulding (as in the nave at Lichfield, Woodcut No. 576), which was one of the earliest and most effective discoveries of the 13th century.

Sometimes a band of foliage was introduced with the dog-tooth, as in the doorways leading to the choir aisles at Lincoln (Woodcut No. 619),

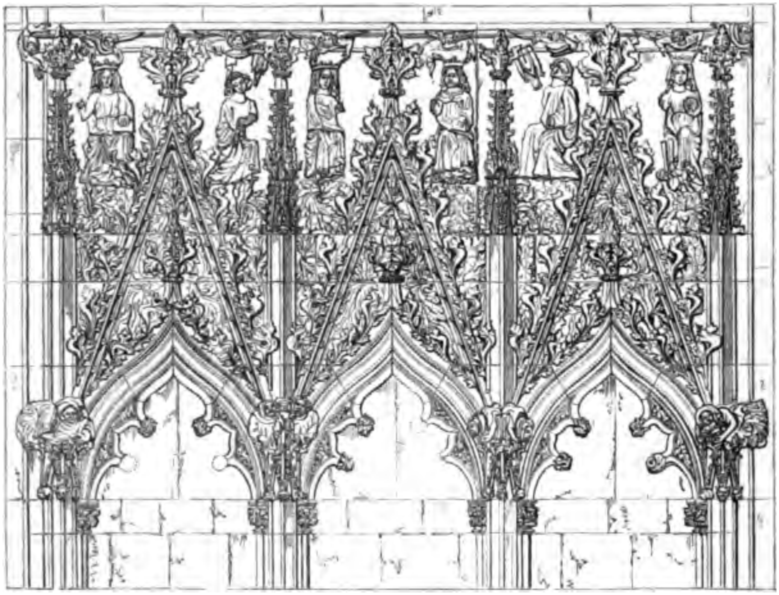


620. West Doorway, Lichfield Cathedral. (Cath. Hb.)

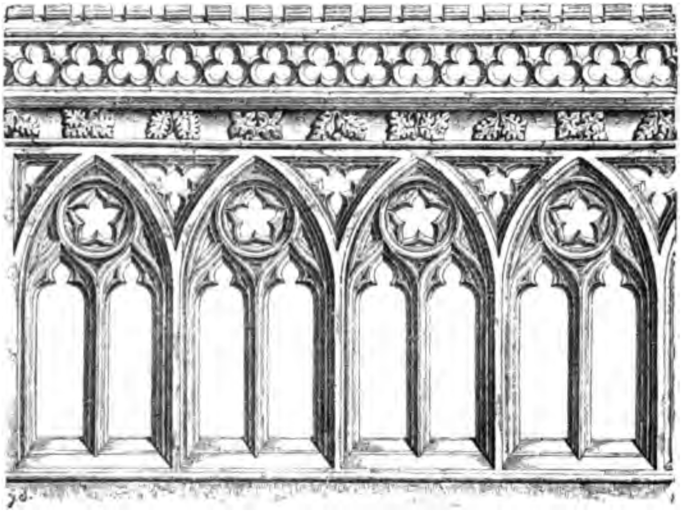


621. Tomb of Bishop Marshall, Exeter Cathedral. (Cath. Hb.)

making together as effective a piece of decoration as any in the whole range of English architecture,—more difficult to design, but less expensive to execute, than many Norman examples, and infinitely more effective when done.

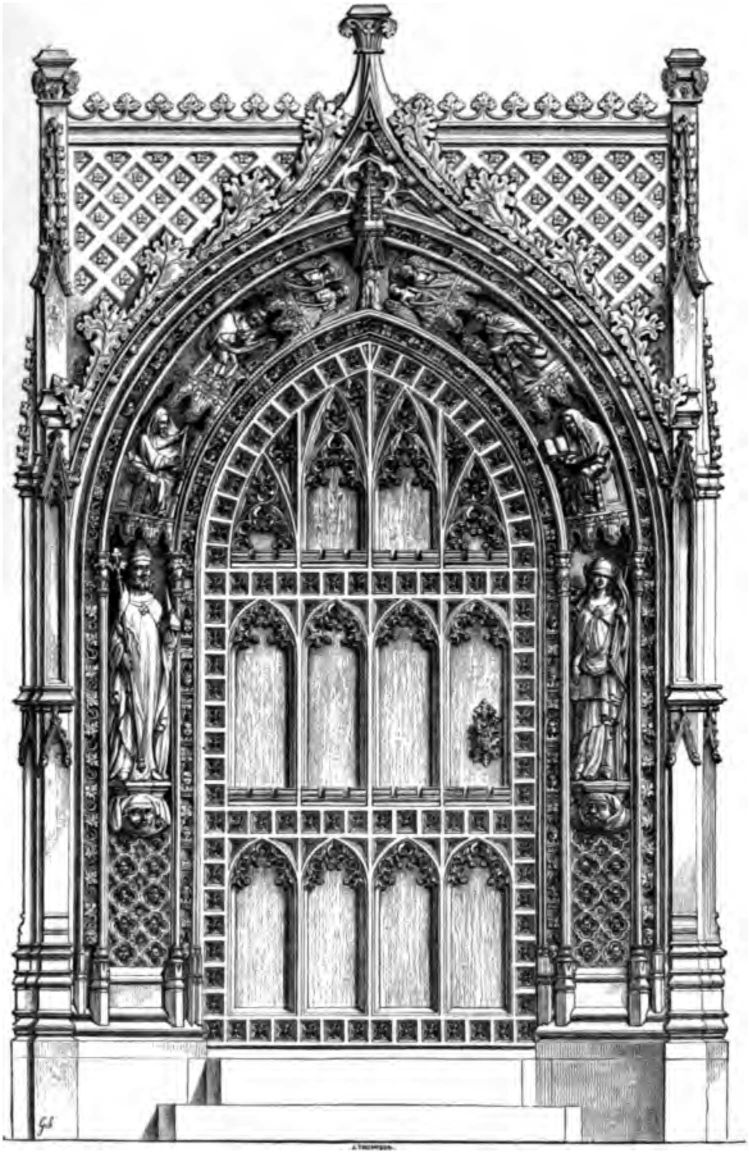


622. Triple Canopy, Heckington Church, Lincolnshire.



623. Prior de Estria's Screen, Canterbury Cathedral. (Cath. Hb.)

The west doorway at Lichfield (A.D. 1275, Woodcut No. 620) shows the style in its highest degree of perfection. There is just that admixture of architectural moulding with decorative foliage which is necessary to harmonise the constructive necessities of the building with the decorative purposes to which it was to be applied, combined with a feeling of elegance which could only have proceeded from a thoroughly cultivated and refined class of intellect.



624. Doorway of Chapter-House, Rochester Cathedral. (Cath. Hb.)

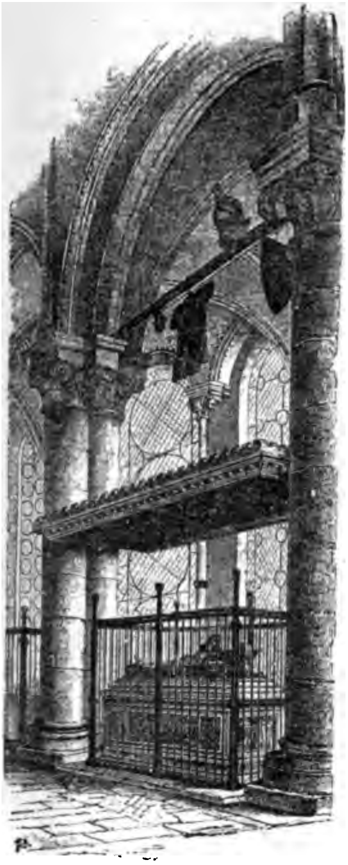
Everything in England of the same age bears the same impress, so that it is difficult to go wrong in selecting examples, though hopeless to expect with any reasonable amount of illustration to explain its beauties. The niches at the back of the altar-screen at Winchester are among the best examples of that combination of constructive lines and decorative details which when properly balanced make up the perfection of architectural decoration; or, perhaps, even better than these are the heads of the three niches over the sedilia in the parish church at Heckington in Lincolnshire (Woodcut No. 622). The style of these examples is peculiar to England, and quite equal to anything that can be found on the Continent; and thousands of examples, more or less perfect, executed during the Edwardian period, exist in every corner of the country. Bishop Marshall's tomb at Exeter (Woodcut No. 621), though somewhat earlier, displays the same playful combination of conventional foliage with architectural details.

After the year 1300, however, we can perceive a change gradually creeping over the style of decoration. Constructive forms are becoming more and more prominent; merely decorative features being gradually dropped as years went on. In Prior de Estria's screen in Canterbury Cathedral, for instance (Woodcut No. 623), though all the elegance of earlier times is retained, the principal features are mechanical, and the decoration much more subdued than in the examples just quoted. The celebrated doorway leading to the chapter-house at Rochester (Woodcut No. 623) is a still more striking example of this. It is rich even to excess; but the larger part of its decoration consists of ornaments which could be drawn with instruments. Of free-hand carving there is comparatively little: and though the whole effect is very satisfactory, there is so evident a tendency towards the mere mechanical arrangement of the Perpendicular style that it does not please to the same extent as earlier works of the same class.

Tombs.

Among the more beautiful objects of decorative art with which our churches were adorned during the Middle Ages are the canopies or shrines erected over the burying-places of kings or prelates, or as cenotaphs in honour of their memory. Simple slabs, with a figure upon them, seem to have been all that was attempted during the Norman period; but the pomp of sepulchral magnificence gradually developed itself, so that by the end of the 13th or beginning of the 14th century we have some of the most splendid specimens existing, and the practice lasted down almost to the Renaissance, as exemplified in Bishop West's tomb at Ely (1515–1534), or Bishop Gardiner's at Winchester (1531–1555).

At first the tomb-builders were content with a simple wooden tester, like that which covers the tomb of the Black Prince at Canterbury; but this became one of great beauty when applied, as in Westminster Abbey, to the tomb of Edward III. (Woodcut No. 626), where its appropriateness and beauty of detail distinguish it from many more ambitious shrines in stone.



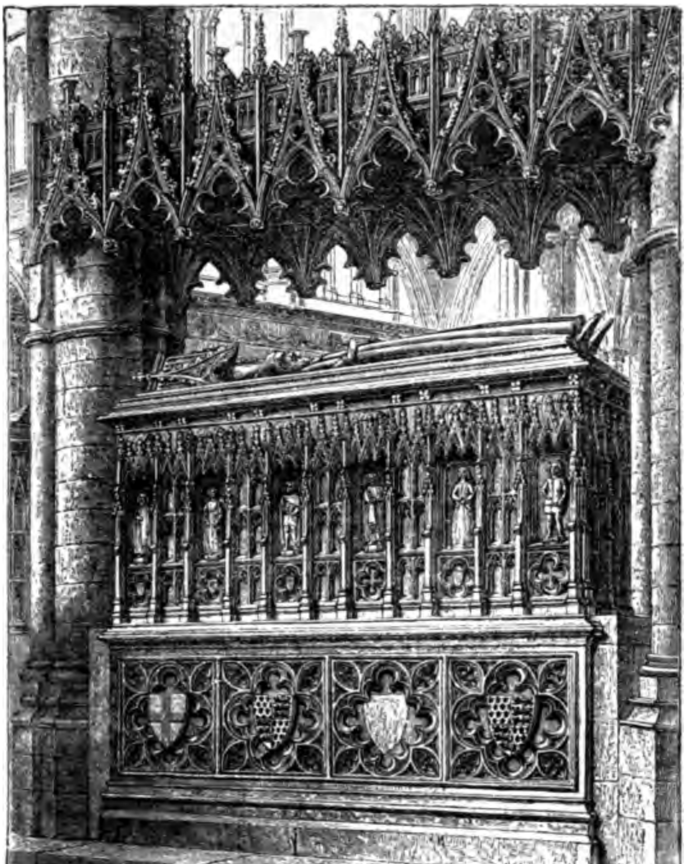
625. Tomb of the Black Prince, Canterbury Cathedral. (Cath. Hb.)

In general design these two monuments are similar to one another, and must have been erected very nearly at the same time—the difference being in the superior richness and elaboration of the regal as compared with the princely tomb.

Although this form of wooden tester was the most usual in monuments of the age, stone canopies were also frequently employed, as in the well-known monument of Aymer de Valence (died 1324) in Westminster Abbey. But all previous examples were excelled by the beautiful shrine which the monks of Gloucester erected, at a considerably later period, over the burying-place of the unfortunate Edward II. (Woodcut No. 627). In its class there is nothing in English architecture more beautiful than this. It belongs to the very best age of the style, and is carried out with a degree of propriety and elegance which has not been surpassed by any example now remaining. If the statues with which it was once adorned could now be replaced, it would convey a more correct idea of the style of the Edwardian period than can be obtained from larger examples.

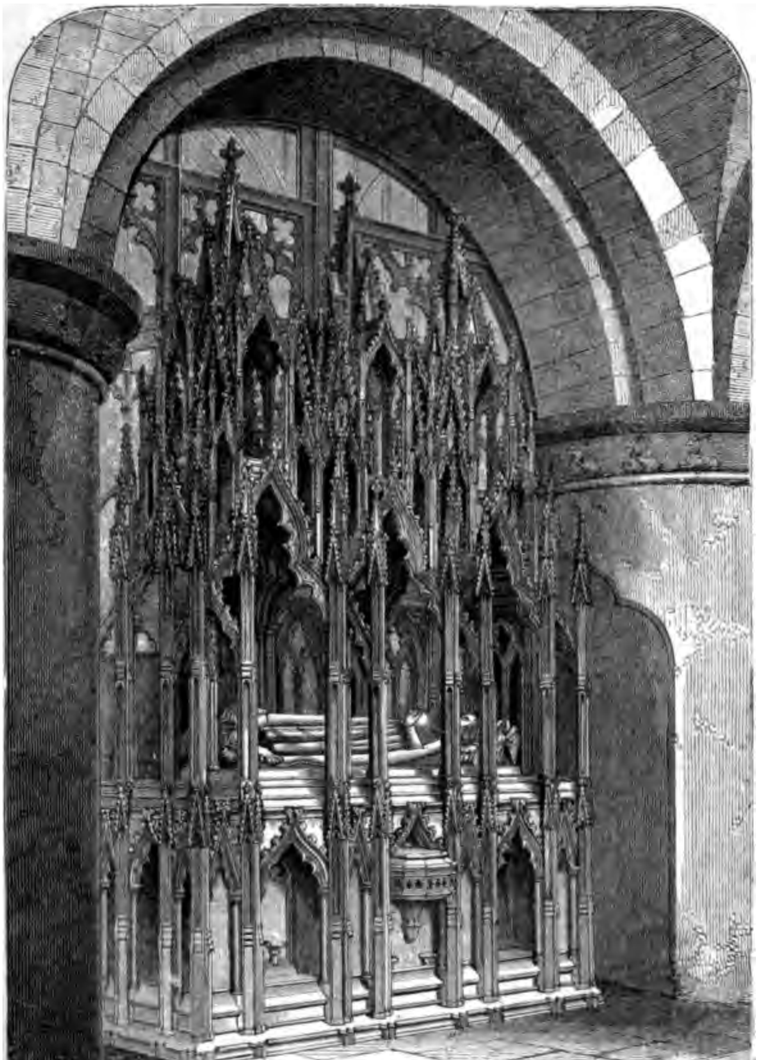
It seems to have been as much admired then as now; for we find its form repeated, with more or less correctness of outline and detail, at Winchester, at Tewkesbury, and St. Alban's, as well as elsewhere, the whole forming a series of architectural illustrations unmatched in their class by anything on the continent of Europe.

As a fine specimen of the form taken by a multitude of these tombs during the last period of Gothic art we may select that of Bishop Redman at Ely (1501–1506). Though so late in date, there is nothing offensive either in its form or detail. On the contrary, it is well proportioned and appropriate; and though there is a little display of over-ingenuity in making the three arches of the canopy sustain themselves without intermediate supports, this is excusable from its position between two massive piers. It is doing in stone what had been done in wood over Edward III.'s tomb at Westminster, and is one of many instances which might be quoted of the interchangeableness of wooden and stone forms during the whole of the Middle Ages in this country, and a proof of the influence the one always had on the other.



626. Tomb of Edward III. in Westminster Abbey.

Among the most beautiful monuments of a quasi-sepulchral character existing in this country are the crosses erected by Edward I. on the spots at which the body of his queen Eleanor rested on its way from Nottinghamshire to London. Originally, it is said, there were fifteen of these, all different in design. Three only now remain: one near Northampton, one at Geddington, and a third at Waltham (Woodcut No. 629).[1] Though greatly dilapidated, enough remains to show what was the original design. While extremely varied both in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627. Tomb of Edward II. in Gloucester Cathedral. (Cath. Hb.)

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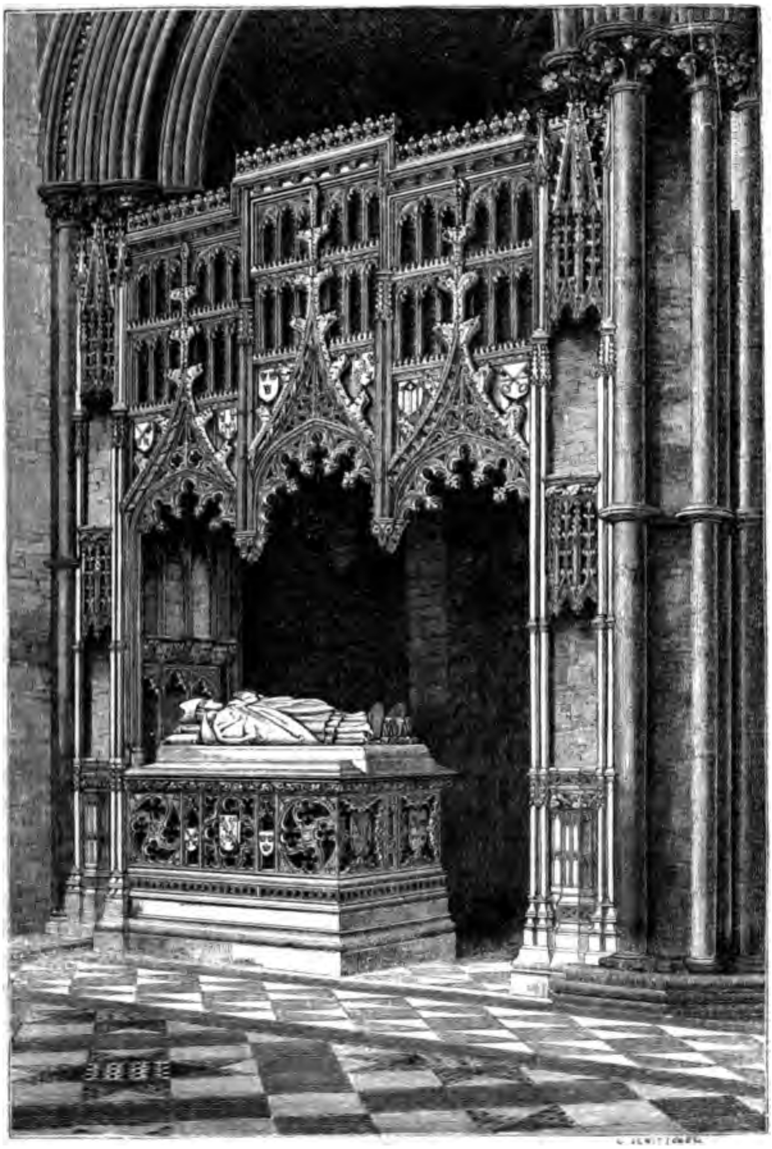
[1] Mr. Scott produced a free copy of one of them as the Oxford Martyrs' Memorial, and Edward Barry another as a restoration of Charing Cross. Both are very beautiful objects, but neither of them exhausts the subject.

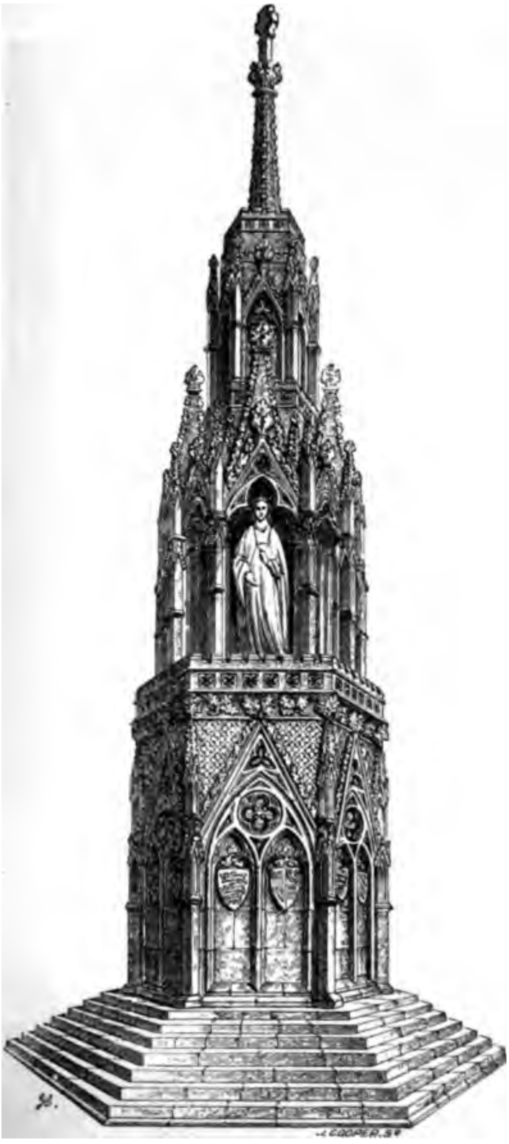
outline and detail, every part is elegant, and worthy of the best age of English architecture.

Had it not been the custom in those days to bury the illustrious dead within the walls of the churches, this is probably the form which sepulchral monuments would generally have taken. If we may judge from the examples left us, we can have little doubt but that,



628. Tomb of Bishop Redman in Ely Cathedral. (Cath. Hb.)

with more experience and somewhat increased dimensions, these monuments would have surpassed the spires of our cathedrals or parish churches in every respect as architectural designs. Being entirely free from utilitarian exigencies, the architect had only to consult the rules of his art in order to produce what would be most pleasing and most appropriate. We can only therefore regret that so purely English a form of sepulchral design began and ended with this one act of conjugal devotion.



629. Waltham Cross (restored).

Civil and Domestic Architecture.

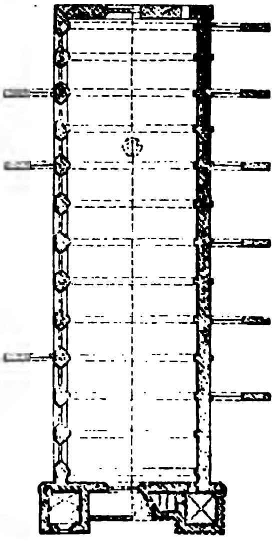
One of the most remarkable characteristics of English architecture, though but a negative one, is the almost total absence of any municipal buildings during the whole period of the Middle Ages. The Guildhall of London is a late specimen, and may even be called an insignificant one, considering the importance of the city. There are also some corporation buildings at Bristol, and one or two unimportant town-halls in other cities; but there we stop. Nothing can more vividly express how completely the country was Frenchified by the result of the battle of Hastings, than this absence of municipal architecture. Till a very recent period the king, the baron, and the bishop, were the estates of the realm. The people were nowhere, and neither municipalities nor guilds could assert an independent existence.

On the other hand, in proportion to her population, England is rich in castles beyond any other country in Europe—especially of the Norman or Round-arched Gothic age. Germany, as already pointed out, has some fine examples of the Hohenstaufen period. France has scarcely any, and neither France nor Germany can match such castles as those of London, Rochester, Norwich, Rising, &c. The Welsh castles of the Edwardian period form an unrivalled group of themselves; and are infinitely superior, both in extent and architectural magnificence, to the much-lauded robber-dens of the Rhineland; while such castles as Raglan, Chepstow, Kenilworth, Warwick, or Windsor are, for picturesque beauty and elegance of detail, quite unmatched, except by one or two ruined strongholds in the North of France. The discussion of their merits, however, would more properly come under the head of military architecture, which is excluded from this work, and cannot therefore be entered on here.

It is difficult, however, to draw the line exactly between the castle and the castellated mansion, the moated grange, and lastly the mansion or manor-house, which, towards the end of the Gothic period had become so numerous in England, and form an architectural group so beautiful and so peculiarly English.

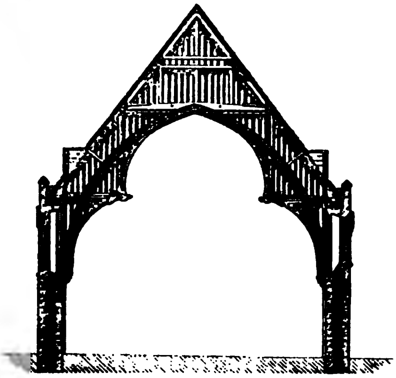
Taken altogether, there is perhaps no class of buildings to which an Englishman may turn with more pride than the educational establishments which the Middle Ages have left him. Though in some cases entirely rebuilt and no doubt very much altered, still the colleges of Oxford and Cambridge retain much of their original features, and are unrivalled in their kind. None of them, it is true, are very ancient as we now see them. With the exception of some of the earlier buildings at Merton, the greater number owe their magnificence to the days of Wykeham (ob. 1426) and Waynflete (ob. 1486). It was during the reign of Henry VI. (1422–1470) that the great impulse was given, not only within the limits of the Universities, but by the foundation of Eton and Winchester, and other great schools, all which belong to the 15th century. But the building of Gothic or quasi-Gothic educational establishments was continued till the death of Queen Elizabeth (1602).

In most respects, these colleges resembled the monastic establishments which, to a certain extent, they may be considered as superseding. The principal difference was that the church of the monastery became subdued into a chapel exclusively devoted to the use of the inmates of the college. In all these establishments, whether palaces or colleges, castles or manor-houses, the principal apartment was the hall, in some cases subordinate to the chapel only. It was on the halls that the architects lavished their art, and, generally speaking, thes are most entitled to be considered as architectural features. Eve now there are in England at least a hundred of these halls, eith entire and in use, or sufficiently perfect to render their restoratio easy. All have deeply and beautifull framed roofs of timber. In this respe they stand alone, no wooden roofs on t Continent being comparable with them.



630. Plan of Westminster Hall. Scale 100 ft. to 1 in.

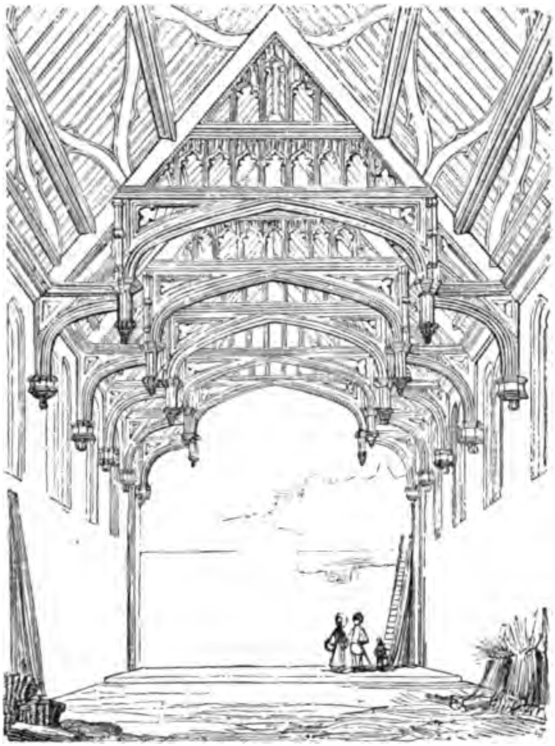
Among them the largest and grande is, as it ought to be, the hall of the King Palace at Westminster, as rebuilt b Richard II. Internally it is 239 ft. lon by 68 ft. in width, covering about 23,0 superficial feet. The hall at Padua is large and so may some others be, but none ha a roof at all approaching this either i beauty of design or mechanical clevern of execution. In this respect it stan quite alone and unrivalled, and, with t smaller roof of St. Stephen's chapel adjoi ing, seems to have formed the type o which most of the subsequent roofs we framed.



631. Section of Westminster Hall. Scale 50 ft. to 1 in.

The roof of the hall at Eltham (Woo cut No. 632), which belongs to the reign of Henry IV., is inferi both in dimensions and design to that at Westminster, but still di plays clearly the characteristi of the style. It would have bee better if the trusses had sprun from a line level with the cil of the windows, and if th arched frame had been less flat but that was the tendency of th age, which soon became so e aggerated as to destroy the co structive proportion altogethe

We are not able to tra the gradual steps by which th hammer-beam truss was pe fected, but we can follow i from the date of the hall a Westminster (1397), to Wolsey's halls at Hampton Court and Oxfor till it passed into the Jacobian abominations of Lambeth or th Inner Temple. Among all these, that of Kenilworth, though sma (86 ft. × 43 ft.), must have been one of the most beautiful. I belongs to an age when the style adopted for halls had reached its acmé of perfection (middle of 15th century), when the details of carpentry had been mastered, but before there was any tendency to tame the deep framing down to the flatness of a ceiling. The wooden roofs of churches were generally flatter and less deeply framed than those of the halls, which may have arisen from their being smaller in span, and being placed over clerestories with little abutment to resist a thrust; but, whether from this or any other cause, they are generally less beautiful.



632. Hall of Palace at Eltham.

There are few features of Mediæval art in this country to which attention could be more profitably directed than the roof; for, whether applied to secular or ecclesiastical buildings, the framed and carved wooden roof is essentially English in execution and application, and is one of the most beautiful and appropriate manifestations of our national art.

Did space admit of it, it would be easy to extend these remarks, and in so doing to explain and prove a great deal which in the previous pages it has been necessary to advance as mere assertion. The subject is, in fact, practically inexhaustible; as will be easily understood when it is remembered that for more than five centuries all the best intellects of the nation were more or less directed towards perfecting this great art. Priests and laymen worked with masons, painters, and sculptors; and all were bent on producing the best possible building, and improving every part and every detail, till the amount of thought and contrivance accumulated in any single great structure is almost incomprehensible. If any one man were to devote a lifetime to the study of one of our great cathedrals—assuming it to be complete in all its Mediæval arrangements—it is questionable whether he would master all its details, and fathom all the reasonings and experiments which led to the glorious result before him. And when we consider that not in the great cities alone, but in every convent and every parish, thoughtful professional men were trying to excel what had been done and was doing, by their predecessors and their fellows, we shall understand what an amount of thought is built into the walls of our churches, castles, colleges, and dwelling-houses. If any one thinks he can master and reproduce all this, he can hardly fail to be mistaken. My own impression is that not one-tenth part of it has been reproduced in all the works written on the subject up to this day, and much of it is probably lost and never again to be recovered for the instruction and delight of future ages.

COMPARATIVE TABLE OF ENGLISH CATHEDRALS.[1]

	Area.	Length inside.	Western Towers.	Central Towers.	Height of Nave.	Height of Choir.	Width of Nave.	Width of Choir.	Width of Central Aisle.	Approximate ratio of Height to Width.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	
York . . .	72,860	486	196	198	93	101	106	102	51	1 to 2
Lincoln . .	66,900	468	206	258	82	71	80	81	39	1 2
Winchester .	64,200	530	..	140	76	..	85	..	35	1 2·43
Westminster	61,729	505	220	..	103	..	75	..	35	1 3
Ely. . . .	61,700	517	215	170	72	70	75	..	34	1 2·1
Canterbury .	56,280	514	152	229	80	70	73	85	33	1 2·4
Salisbury .	55,830	450	..	404	84	..	82	..	35	1 2·3
Durham . .	55,700	473	164	216	74	..	81	77	32	1 2·3
Peterborough	50,516	426	154	143	78	..	79	..	36	1 2
Wells . . .	40,680	388	125	165	67	..	69	..	34	1 2
Norwich . .	40,572	408	..	309	73	..	70	..	26	1 2·8
Worcester .	38,980	387	..	191	66	..	78	..	32	1 2·45
Exeter. . .	35,370	383	..	..	70	..	72	..	34	1 2·1
Lichfield . .	33,930	319	192	252	55	..	66	..	28	1 2

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[1] It is not pretended that this Table is quite correct in all details, but it is sufficiently so to present, at a glance, a comparative view of the fourteen principal churches of England, and to show at least their relative dimensions.

CHAPTER IV.

ARCHITECTURE OF SCOTLAND.

CONTENTS.

Affinities of Style — Early Specimens — Cathedral of Glasgow — Elgin — Melrose — Other Churches — Monasteries.

CHRONOLOGY.

		DATES.			DATES.
Malcolm Canmore.	Accession	A.D. 1057	David II.	Accession	A.D. 1329
David I.	"	1124	Robert II., Stuart	"	1371
William the Lion	"	1165	James I.	"	1406
John Baliol	"	1292	Mary Queen of Scots	"	1542
Robert Bruce	"	1306			

There are few countries in the world in respect to whose architecture it is so difficult to write anything like a connected narrative as it is regarding that of Scotland. The difficulty does not arise from the paucity of examples, or from their not having been sufficiently examined or edited, but from the circumstance of the art not being indigenous. No one who knows anything of the ethnography of art would suspect the people who now inhabit the lowlands of Scotland of inventing any form of architecture, or of feeling much sympathy with it when introduced from abroad. It may have been that the Celtic element was more predominant in the country during the Middle Ages, and that the Teutonic race only came to the surface with the Reformation, when they showed their national characteristic in their readiness to destroy what they could not build. If this were not so, it must have been that their priests were strangers, who brought their arts with them and practised them for their own satisfaction, in despite of the feelings of their flocks.

Briefly, the outline of Scotland's architectural story seems to be this. Till the time of the wars of the Edwards, the boundary line between the styles on either side of the border cannot be very clearly defined. In Scotland the forms were ruder and bolder than in the South, but were still the same in all essential respects.

After the days of Wallace and of Bruce, hatred of the English threw the Scotch into the arms of France. Instead of the Perpendicular style of the South, we find an increasing tendency to copy the Flamboyant and other contemporary styles of France, till at last, just as the style was expiring, both churches and mansions are almost literal copies of French designs. But, in addition to these, an Irish element is strongly felt: at Iona and throughout the West, extending —in exceptional cases to the East, as at Brechin and Abernethy. It can also be traced in the Lothians in the chapels and smaller edifices of the 11th and 12th centuries, and seems to be the ingredient which distinguishes the early Round-arched Gothic of Scotland from the Norman of England. Besides these three, a Scandinavian element makes itself felt in the Orkneys, and as far south as Morayshire; and even Spain is said to have contributed the design to Roslyn Chapel, and made her influence felt elsewhere.

All these foreign elements, imported into a country where a great mass of the people belonged to an art-hating race, tended to produce an entanglement of history very difficult to unravel. With leisure and space, however, it might be accomplished; and, if properly completed, would form a singularly interesting illustration, not only of the ethnography of Scotland, but of art in general.

The buildings of David I. (1124–1165) gave an immense impulse to the round-arched style, which continued for nearly a century after his time, and long after the pointed arch had been currently used in the South. It is true we find pointed arches mixed up with it, as at Jedburgh, but the pillars and capitals are those of the earlier orders; and the circular arch continued to be used from predilection wherever the constructive necessities of the building did not suggest the employment of the pointed form.

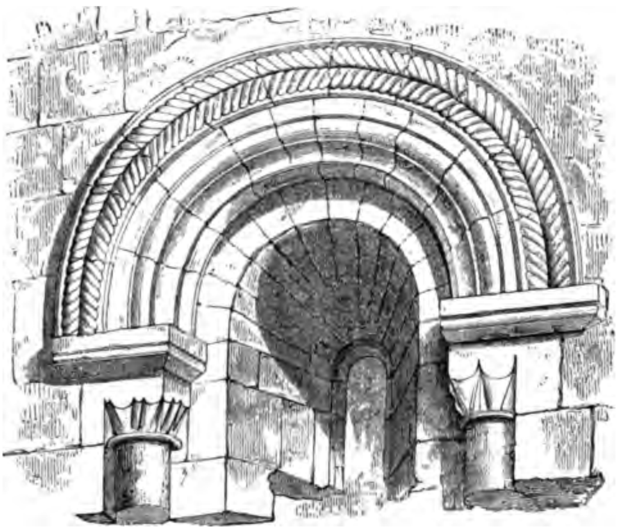
The feature of English art which the Scotch seem to have best appreciated was the lancet window, which suited their simple style so completely that they clung to it long after its use had been abandoned in England. This circumstance has given rise to much confusion in the dates of Scottish buildings, antiquaries being unwilling to believe that the lancet windows of Elgin and other churches really belong to the middle of the 14th century, after England had passed through the phases of circle and flowing tracery, and was settling down to the sober constructiveness of the perpendicular.

Circle tracery is, in fact, very little known in the North, and English flowing tracery hardly to be found in all Scotland. It is true that a class of flowing tracery occurs everywhere in Scotland, but it is, both in form and age, much more closely allied to French Flamboyant than to anything English. It was used currently during the whole period between the 2nd and 3rd Richards, and even during the Tudor period of England.

The one great exception to what has been said is the east window of the border monastery of Melrose; but even here it is not English perpendicular, but an original mode of treating an English idea, found only in this one instance, and mixed up with the flowing tracery of the period.

Of Tudor architecture there is no trace in Scotland; neither the four-centred low arch nor fan-vaulting are to be found there, nor that peculiar class of perpendicular tracery which distinguished the 16th and 17th centuries in the South. At that period the Scotch still adhered to their flamboyant style, and such attempts as they did make at perpendicular work were so clumsy and unconstructive that it is little wonder that, like the French, they soon abandoned it.

In so poor and thinly-populated a country as Scotland was in the 11th century, it would be in vain to look for any of the great ecclesiastical establishments that are found in the South. The churches seem at this age to have been cells or small chapels, such as that at Leuchars or Dalmeny, closely resembling St. Clement's church at Trondhjem, and a little larger than the contemporary edifices so frequently found in Ireland.



633. Window, Leuchars. (From a Drawing by R. W. Billings.[1])

Leuchars is perhaps the most characteristic and beautiful specimen of its class, of which, like the contemporary chapel at Cashel, which it much resembles, it may be considered as the type. Its details are not only rich, but, as may be seen from the woodcut, bold and elegant at the same time. Both internally and externally, the ornament is

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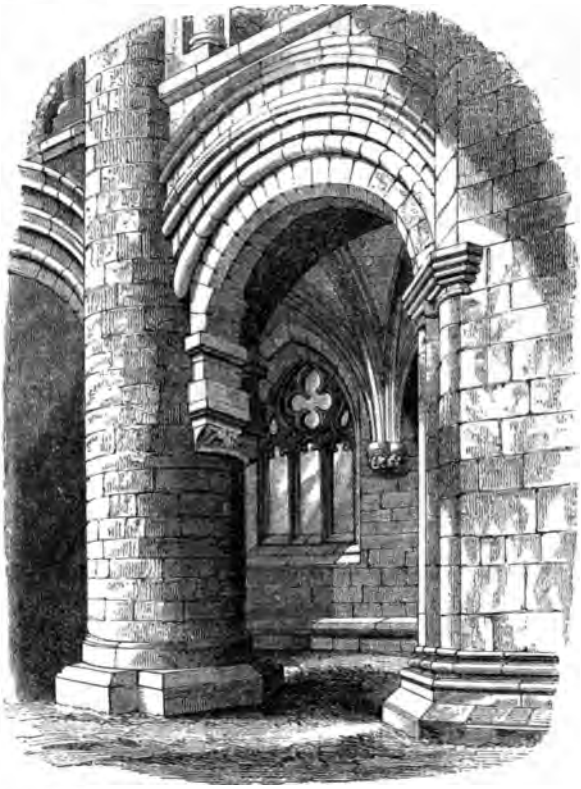
[1] The illustrations in this chapter being taken from the beautiful work by R. W. Billings, entitled 'The Baronial and Ecclesiastical Antiquities of Scotland,' the source of each will not be specified, except when it forms an exception to this rule. Mr. Billings' work is certainly the most correct and beautiful that has yet appeared on the subject, and if completed with the necessary plans and architectural details, would be unrivalled as a monograph of an architectural province.

applied in so masterly a manner that the beauty of the art mak
up for the smallness of dimensions, and renders it one of the mo
interesting churches in Scotland.

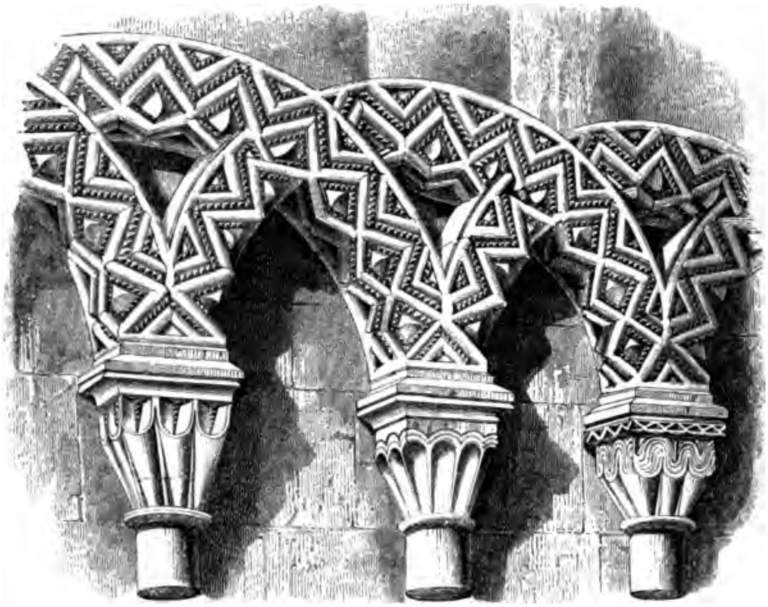
David I. seems to have been the first king who gave an impulse
the monastic establishments and to the building of larger church
His endowment of the great border abbeys, and his general patrona
of the monks, enabled them to undertake buildings on a greatly e
tended scale. The churches of Jedburgh and Kelso, as we now fi



634. Pier-Arch, Jedburgh.

them, belong either to the very end of the 12th or beginning of t
13th century. They display all the rude magnificence of the Norm
period, used in this instance not experimentally, as was too often t
case in England, but as a well-understood style, whose features we
fully perfected. So far from striving after novelty, the Scotch arc
tects were looking backwards, and culling the beauties of a lon
established style. The great arch under the tower of Kelso is certain
a well-understood example of the pointed-arched architecture of t
13th century, while around it and above it nothing is to be seen b

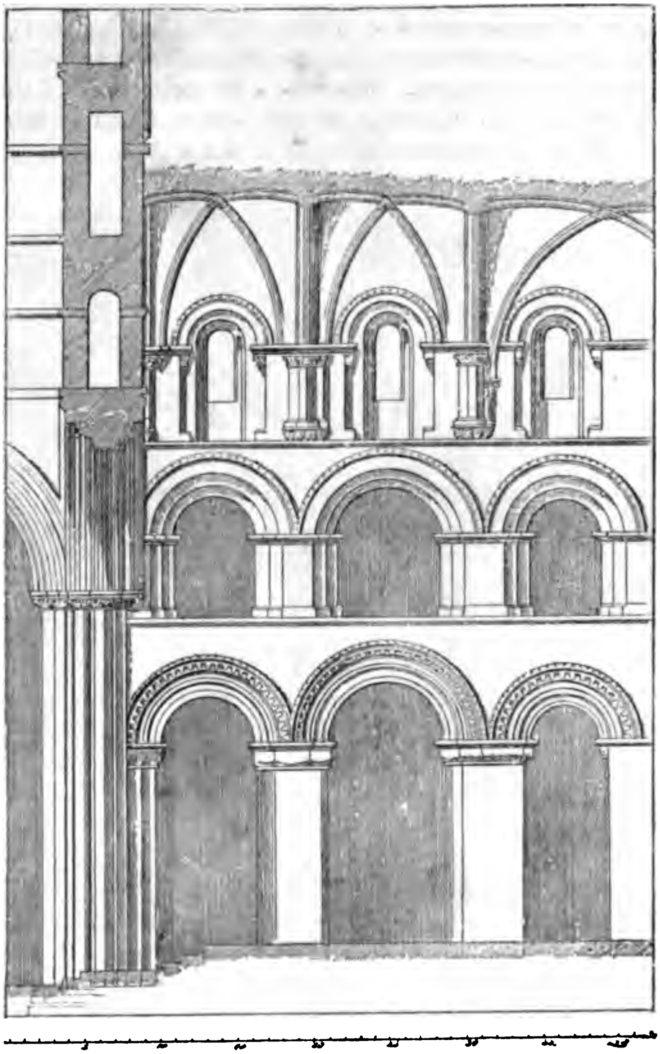
circular-headed openings, combined generally with the beaded shafts and the foliage of the Early English period. The whole is used with a Doric simplicity and boldness which is very remarkable. Sometimes, it must be confessed, this independence of constraint is carried a little too far, as in the pier-arches at Jedburgh (Woodcut No. 634), which are thrown across between the circular pillars without any subordinate shaft or apparent support. This was a favourite trick of the later Gothic architects of Germany, though seldom found at this early period. Here the excessive strength of the arch in great measure excuses it.



635. Arches in Kelso Abbey.

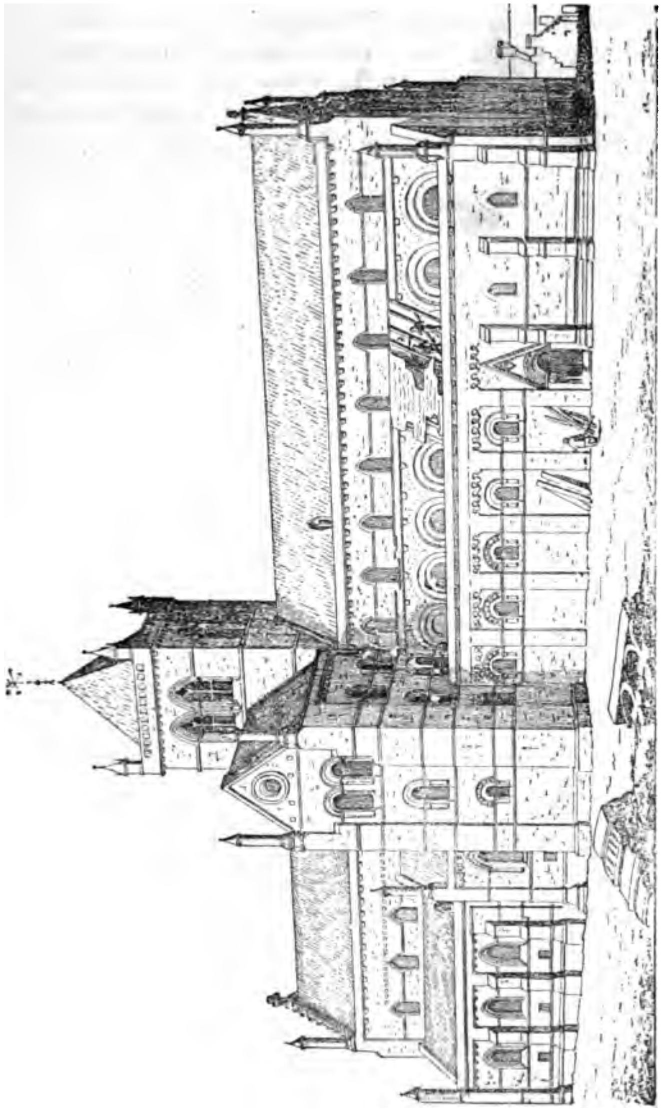
Besides the general grandeur of their designs, a great deal of the detail of these abbeys is of the richest and best class of the age. The favourite form, as at Leuchars, is that of circular arches intersecting one another so as to form pointed sub-arches, and these are generally ornamented with all the elaborate intricacy of the period, such as is shown in Woodcut No. 635, taken from Kelso Abbey Church.

While these great abbeys were being erected in the southern extremity of the kingdom, the cathedral of St. Magnus was founded at the other extremity, at Kirkwall in the Orkneys. This building was commenced 1137, and carried on with vigour for some time. The first three arches of the choir (Woodcut No. 636) are all that can certainly be identified as belonging to that period. The arch of the tower belongs probably to the 14th century, and the vaulting can hardly be much earlier. The three arches beyond this are still circular, though with mouldings of a late period. It is said that these were not completed till the 16th century.



626. Three Bays of Cathedral at Kirkwall.

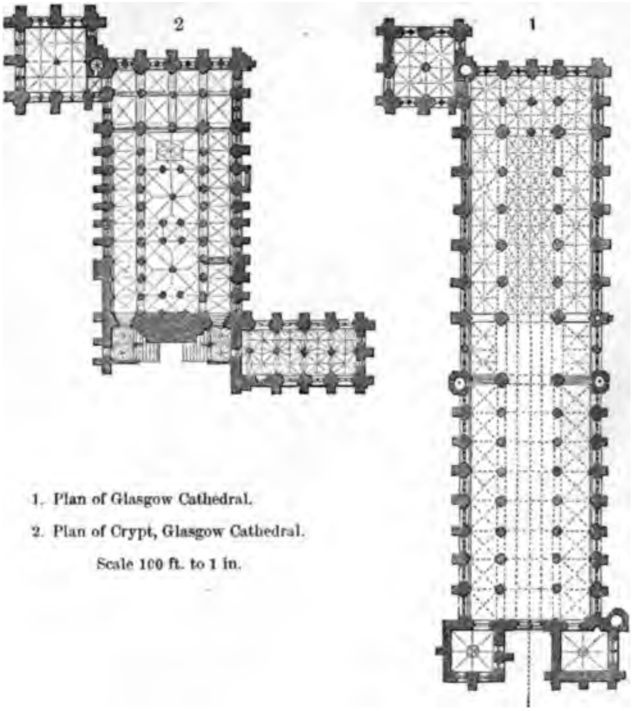
Farther south, arches of this late age could not have been built in such an ancient style, but we can believe that in that remote corner the old familiar modes were retained in spite of changing fashions; and the consequence is that, though the building of this cathedral was carried on at intervals during 400 years, it is at first sight singularly uniform in style, and has all the characteristics of an old Norman building, as may be seen from the woodcut.



637. North Side of the Cathedral at Kirkwall.

The cathedral of Glasgow (Woodcut No. 642) is almost the only other of the great ecclesiastical edifices of Scotland which retains its original features in a nearly perfect state. It is at the same time one of the most satisfactory and characteristic buildings to be found in the country.

The bishopric was founded by David I., but it was not till after several destructions by fire that the present building was commenced, probably about the year 1240. The crypt and the whole of the choir belong to the latter part of the 13th century, the nave to the 14th, the tower and spire to the 15th. The central aisle never having been intended to be vaulted, the architect has been enabled to dispense with all pinnacles, flying buttresses, and such expedients, and thus to give the whole outline a degree of solidity and repose which is extremely beautiful, and accords perfectly with the simple lancet openings which prevail throughout.



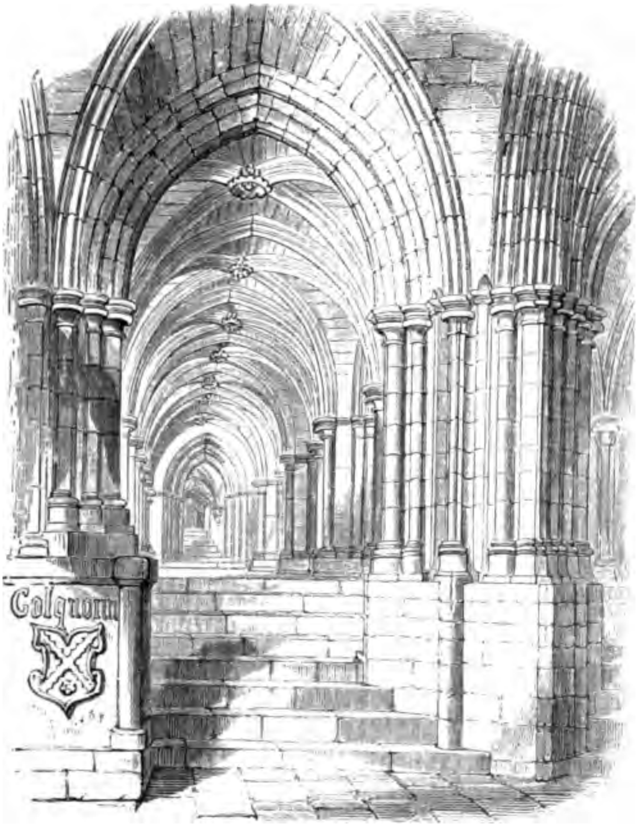
1. Plan of Glasgow Cathedral.
2. Plan of Crypt, Glasgow Cathedral.

Scale 100 ft. to 1 in.

638. (From J. Collie's Description of this Church.)

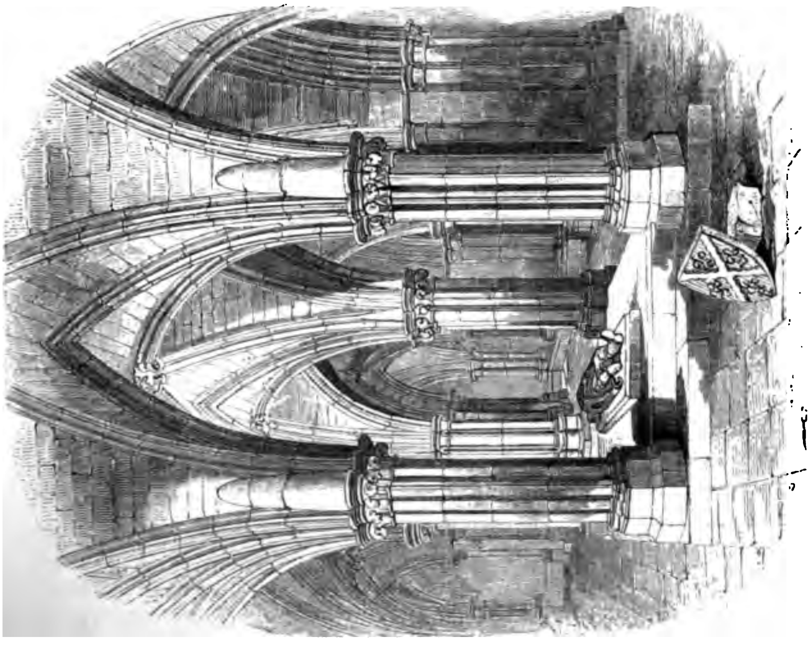
The whole length of the building externally, exclusive of the western towers, one of which has recently been pulled down, is 300 feet, the breadth 73, and the area about 26,400 feet, so that it is far from being a large building; but its situation is so good, and its design and proportions so appropriate and satisfactory throughout, that it is more imposing than many others of twice its dimensions. The spire, which is 219 feet in height from the floor of the church, is in perfect proportion to the rest of the building, both in dimensions and outline, and aids very much the general effect of the whole.

The glory of this cathedral is its crypt, which is unrivalled in Britain, and indeed perhaps in Europe. Almost all the crypts now found in England were built during the Norman period, or very early in the pointed style. That at Glasgow, however, belongs to the perfected style of the 13th century, and as the ground falls rapidly towards the west, the architect was enabled to give it all the height required, and to light it with perfect ease. Here the crypt actually extends under and beyond the whole choir. Had there been an opening in the centre of the vault (and it is by no means clear that one was not originally intended), it would be more like a German double church than anything found in England. There is a solidity in its architecture, a richness in its vaulting, and a variety of perspective in the spacing of its pillars, which make it one of the most perfect pieces of architecture in these islands.

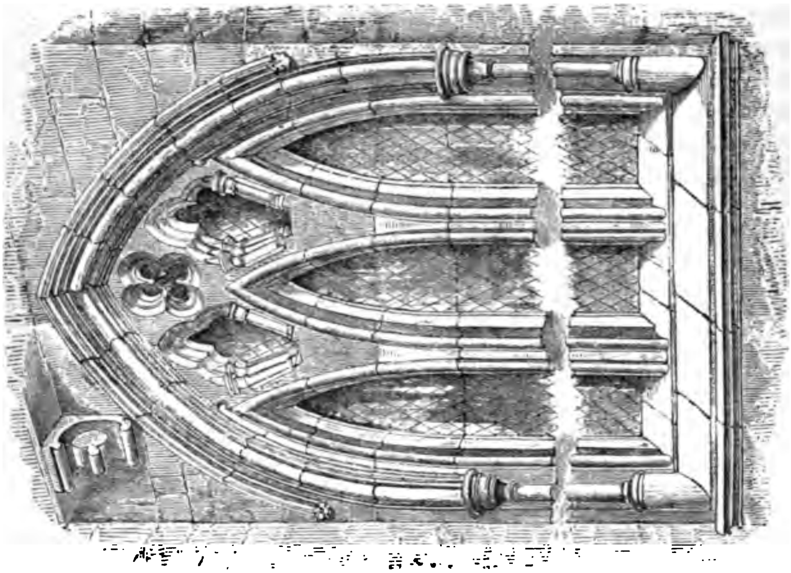


639. View in Crypt of Glasgow Cathedral.

In the crypt and lower part of the church the windows are generally single or double lancet, united by an arch. In the clerestory

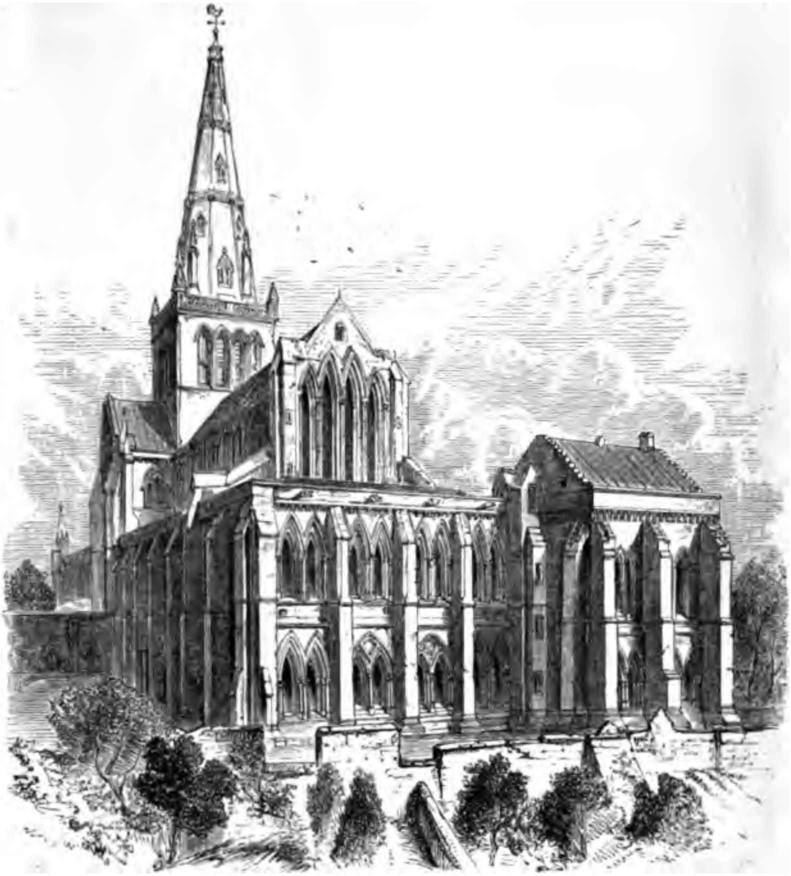


640. Crypt of Cathedral at Glasgow.



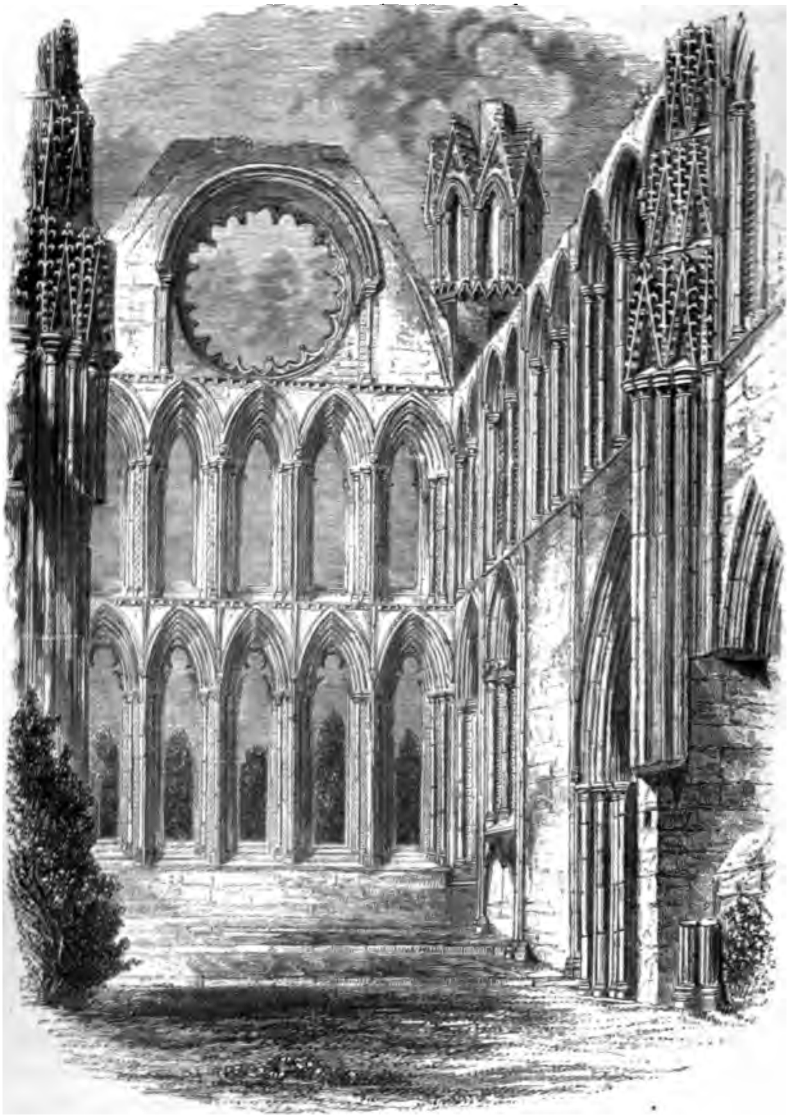
641. Clerestory Window, Glasgow Cathedral.

they sometimes take the form of three lancets, united, as shown in Woodcut No. 641, by an imperfect kind of tracery, more in accordance with the simplicity of the building than the more complex form prevalent in England at the same period. In the south transept, and some of the later additions, there is tracery of considerable elaboration and beauty of design.



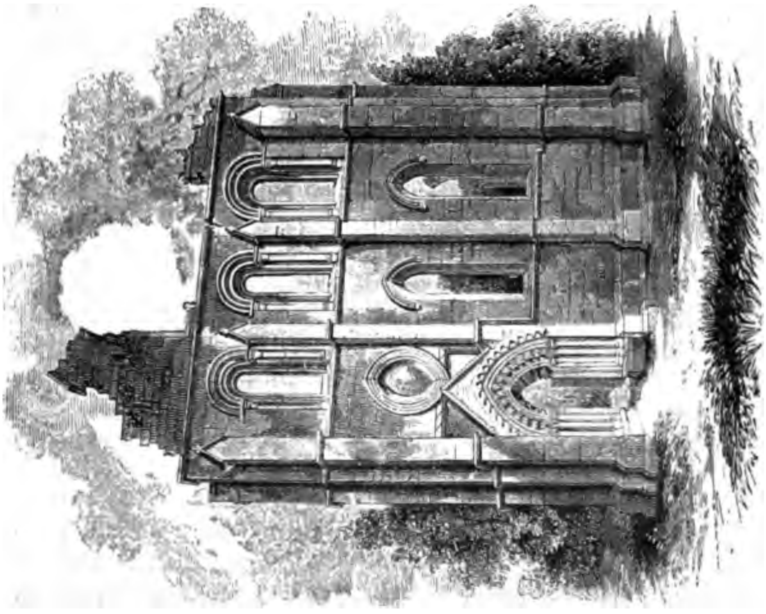
642. East End of Glasgow Cathedral.

Perhaps the most beautiful building in Scotland is, or was, the cathedral of Elgin. The province of Moray in which it was situated was so remote that it seems to have been comparatively undisturbed by the English wars, and the greater part of the building was erected during the Edwardian period, with all the beautiful details of that age. The seat of the see was removed from Spynie to Elgin in the year 1223, and the cathedral commenced contemporaneously with those of Amiens and Salisbury. All that now remains of this period is the fragment of the south transept (Woodcut No. 644), where we see the round arch reappearing over the pointed, at a period when its use was entirely discontinued

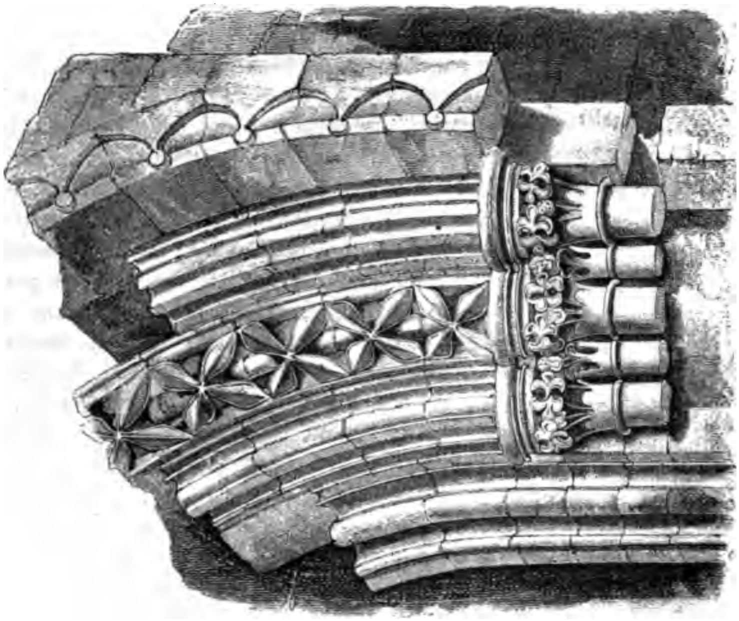


643. East End, Elgin Cathedral.

in the South. At the same time the details of the doorway (Woodcut No. 645) show that in other respects the style was at that period as far advanced as in England. The cathedral was burnt down in

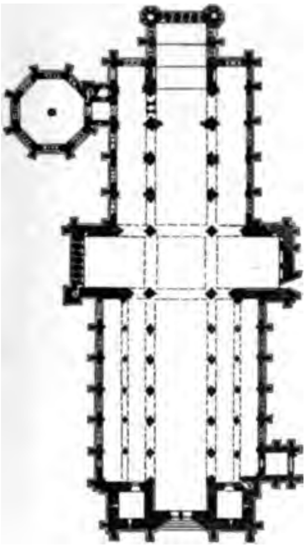


644. South Transept, Elgin Cathedral.



645. Ornament of Doorway, Elgin Cathedral.

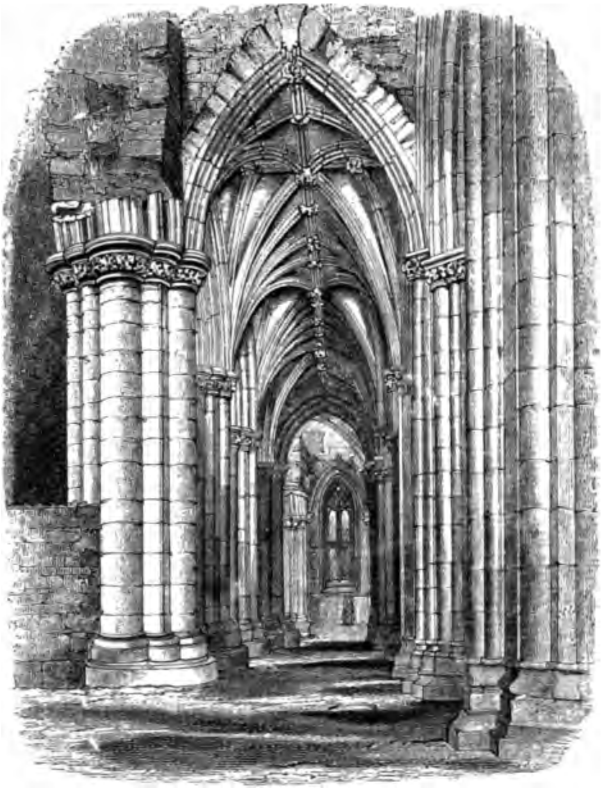
1270, and again partially in 1390. The choir and other parts which still remain were built subsequently to the first conflagration, and escaped the second. These parts appear at first sight to belong to the lancet style of the previous century, but used with the details and tracery of the Edwardian period, and with a degree of beauty hardly surpassed anywhere. As compared with English cathedrals, that at Elgin must be considered as a small church, being only 253 ft. in length internally, and 82 wide across the five aisles of the nave. It is very beautifully arranged, and on the whole is perhaps more elegant in plan than any of the Southern examples. As a mechanical design, its worst fault is that the piers supporting the central tower want strength and accentuation. As will be seen from the plan, an attempt was made to throw the weight of the tower on the transept walls, which are built solid for this purpose; but this was artistically a mistake, while mechanically it caused the destruction of the tower at the beginning of the last century. The choir (see Woodcut No. 643), is terminated by what is virtually a great east window, but with piers between the compartments instead of mullions. As an architectural object this is a far more stable and appropriate design than a great mullioned window like that of York and others in England. But the latter must be judged of as frames for glass pictures, which Elgin is by no means so well suited to display. Its details, however, are exquisite, and the whole design very rich and beautiful.



646. Plan of Elgin Cathedral. (From an Original Plan.) Scale 100 ft. to 1 in.

The north and south aisles of the nave and the chapter-house were rebuilt after the last destruction, and belong to the 15th century. These parts, though very charming, display generally the faults of the Scotch flamboyant style, and show a certain amount of heaviness and clumsiness mixed with the flowing and unconstructive lines of this class of tracery, which nothing could redeem but the grace and elegance with which the French always used it.

Next in beauty to Elgin Cathedral is the well-known abbey at Melrose. This, though founded contemporaneously with Jedburgh and Kelso, was entirely rebuilt during the Lancastrian period, and, owing to its situation near the border, shows much more affinity to the English style than the building last described. The nave, as may be seen from the view of its aisle (Woodcut No. 647), is of a bold, solid style of architecture, with a vault of considerable richness. The window of the south transept is the most elegant specimen of flowing tracery to be found in Scotland, and its great east window (Woodcut No. 648), as before remarked, is almost the only example of the perpendicular style in the North, and is equal to anything of the kind on this side of the Tweed.



647. Aisle in Melrose Abbey.

Few of the architectural antiquities of Scotland are so well known, or have been so much admired, as the chapel at Roslyn (Woodcut No. 649), which William St. Clair caused to be erected in the year 1446. For this purpose he did not employ his countrymen, but "brought artificers from other regions and forraigne kingdomes,"[1] and employed them to erect a building very unlike anything else to be found in Great Britain.

Our present knowledge of styles enables us to pronounce with little doubt that his architects came from the Spanish peninsula. In fact, there is no detail or ornament in the whole building which may not be traced back to Burgos or Belem; though there is a certain clumsiness both in the carving and construction that betrays the workmanship of persons not too familiar with the task that they were employed upon. The building, which perhaps exhibits the greatest affinity of detail to the Chapel is the church at Belem on the Tagus, opposite Lisbon (Woodcut No. 702). Nothing, in fact, can well be more similar than the two are. That at Roslyn is the oldest, having been commenced in 1446. Belem, begun in 1498, was finished apparently in 1511, at which date the Scottish example hardly appears to have been complete. Roslyn Chapel is small, only 68 ft. by 35 ft. internally. The central aisle is but 15 ft. wide, and has the Southern peculiarity of a tunnel-vault with only transverse ribs, such as is found at Fontifroide (Woodcut No. 319), and in almost all the old churches of the South of France. The ornaments between these, which were painted in the earlier examples, are at Roslyn carved in relief. The vault, as in the South, is a true roof, the covering slabs being laid directly on the extrados or outside of it, without the intervention of any woodwork, a circumstance to which the chapel owes its preservation to the present day. Beyond the upper chapel is a sub-chapel (Woodcut No. 650), displaying the same mode of

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[1] Britton's 'Architectural Antiquities,' vol. xiv. p. 81.

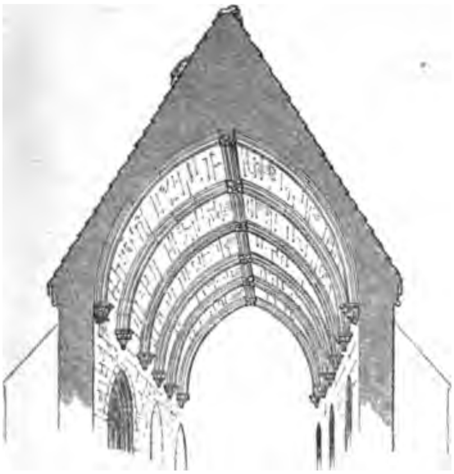
648. East Window, Melrose.

649. Chapel at Roslyn.

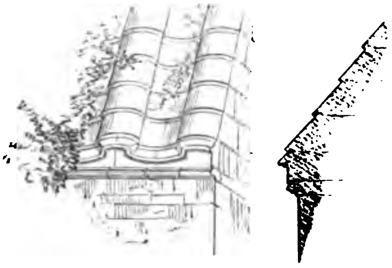
650. Under Chapel, Roslyn

vaulting in a simpler form, but equally foreign and unlike the usual form of vaults in Scotland.

Another very interesting chapel of the same class is that now used as the church at Bothwell, near Glasgow. Like Roslyn, it has the peculiarity unknown in England, though common in the South of France, of a tunnel-vault with a stone roof resting directly upon it. It is not large, measuring only 53 feet by 22, internally. The beauty of its details, however—late in the 14th century — and the simplicity of its outline, combined with the solidity of its stone roof, impart to the whole an air of grandeur far greater than its dimensions would justify. Had it been constructed with a timber roof, as usual in churches of its date, it would hardly be considered remarkable, but it is redeemed both internally and externally by its stone roof. As will be seen from Woodcut No. 652, the arrangement of the stones forming the roof is very elegant, and gave rise to a form of battlement frequently found afterwards in Scotland, though generally used only as an ornament.[1]



651. Stone Roof of Bothwell Church. (From a Drawing by J. Honeyman, jun.)



652. Exterior of Roof of Bothwell Church.

The chapel attached to the palace at Holyrood is of a very different character from that at Roslyn; being infinitely more beautiful, though not nearly so curious. The building was originally founded by David I. in 1128, but what now remains belongs to the latter end of the 13th or beginning of the 14th century, and has all the elegance of the Edwardian style joined to a massiveness which in England would indicate a far earlier period. Some of its details (as that shown, Woodcut No. 653) are of a beautiful transitional

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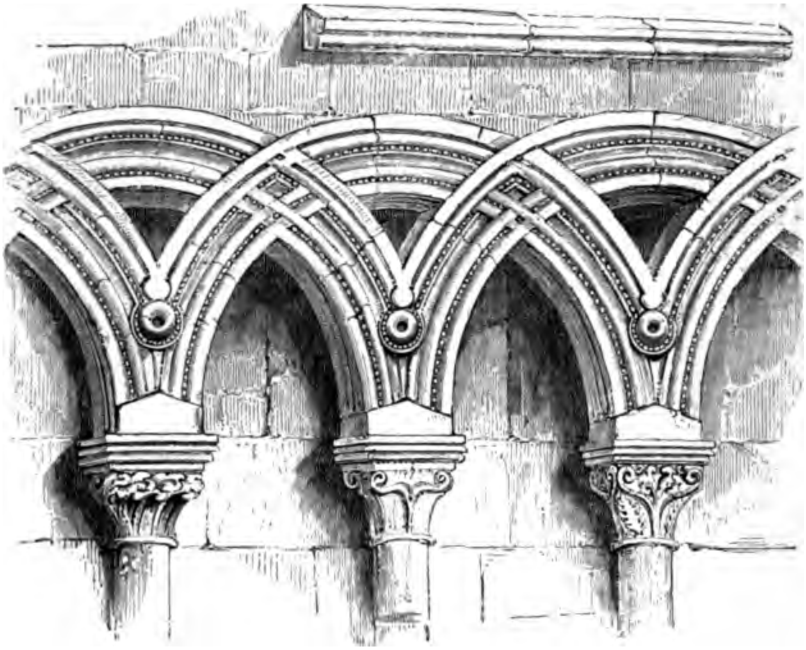
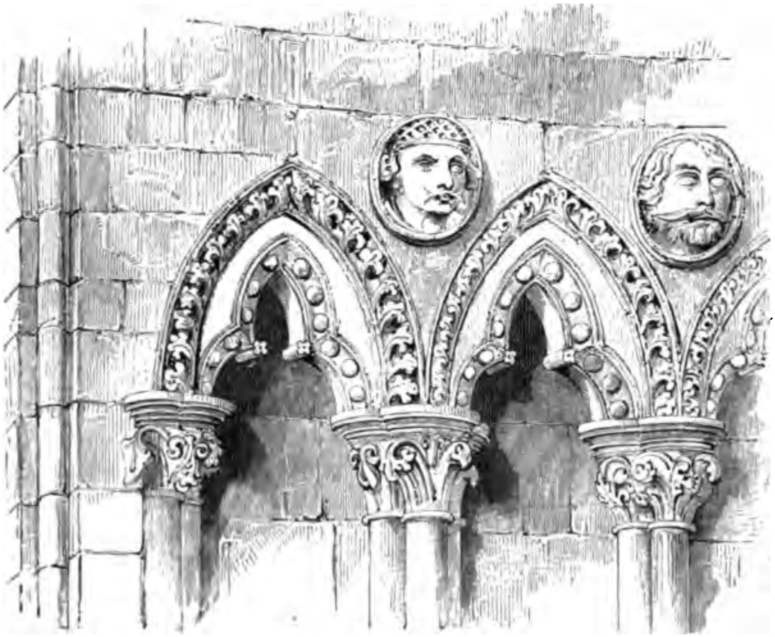
[1] For the drawings and information regarding Bothwell Church, I am indebted to Mr. John Honeyman, jun., architect, of Glasgow.



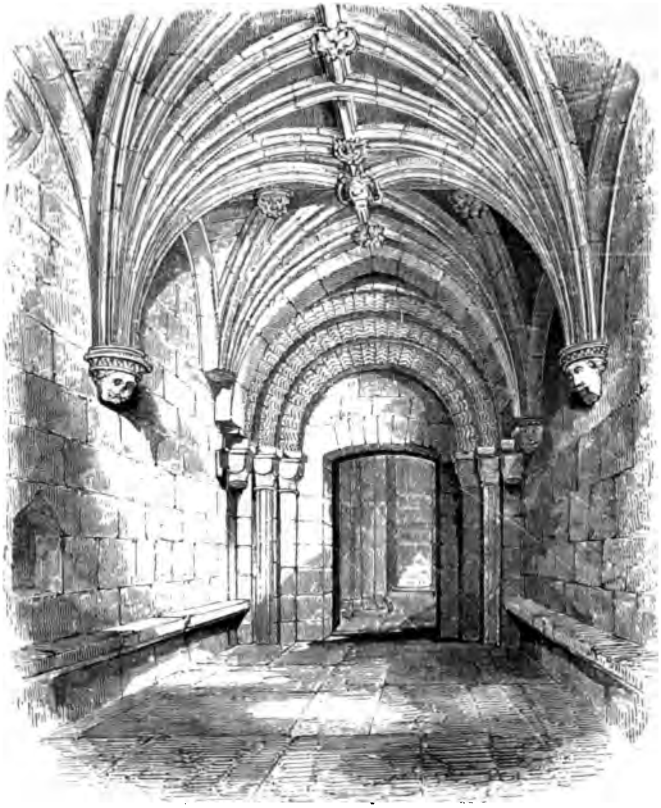
653. Ornamental Arcade from Holyrood.



654. Ornamental Arcade from Holyrood.

character, though not so early as might be suspected; and others (such as Woodcut No. 654) have the rich but foreign aspect that generally characterises the architecture of Scotland.

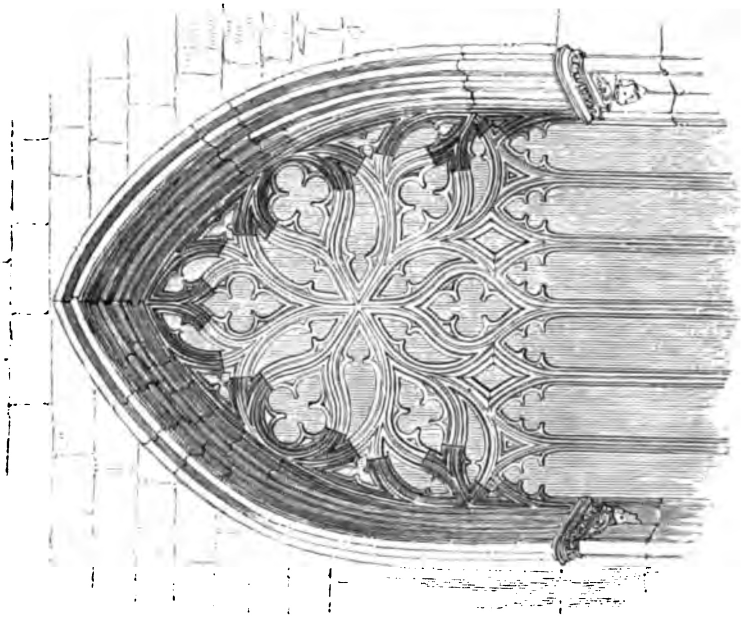
The nave of the cathedral of Aberdeen is still sufficiently entire to be used as a church, and with its twin western spires of bold castellated design is an impressive building; but it has a character of over-heaviness arising from the material used being granite, which did not admit of any of the lighter graces of Gothic art.



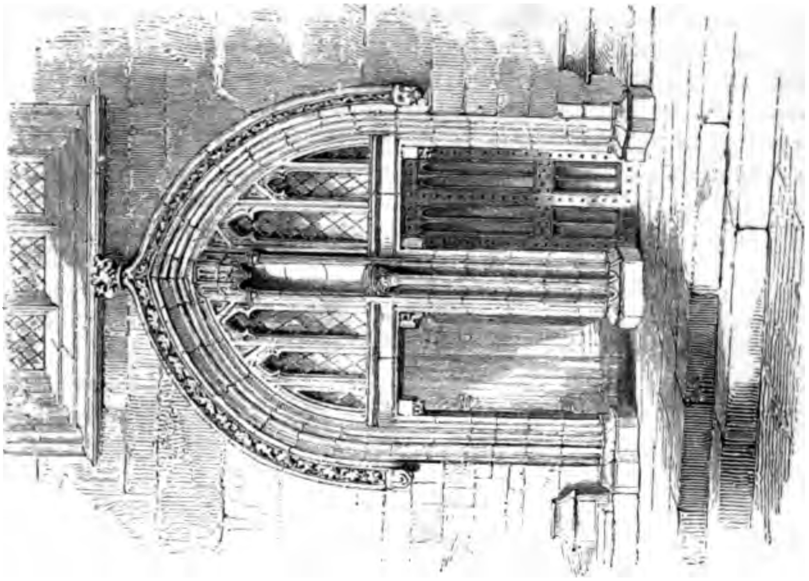
655. Interior of Porch, Dunfermline.

The cathedral of St. Andrew's must at one time have been one of the most beautiful in Scotland, but fragments only of its east and west ends now remain. They suffice to show that it was of considerable dimensions, and inferior, perhaps, only to Elgin and Melrose in beauty of detail.

Besides these there are in Scotland many ruined monastic establishments, all evincing more or less beauty of design and detail. One of the most remarkable of these is Dunfermline, whose nave is of a bold,

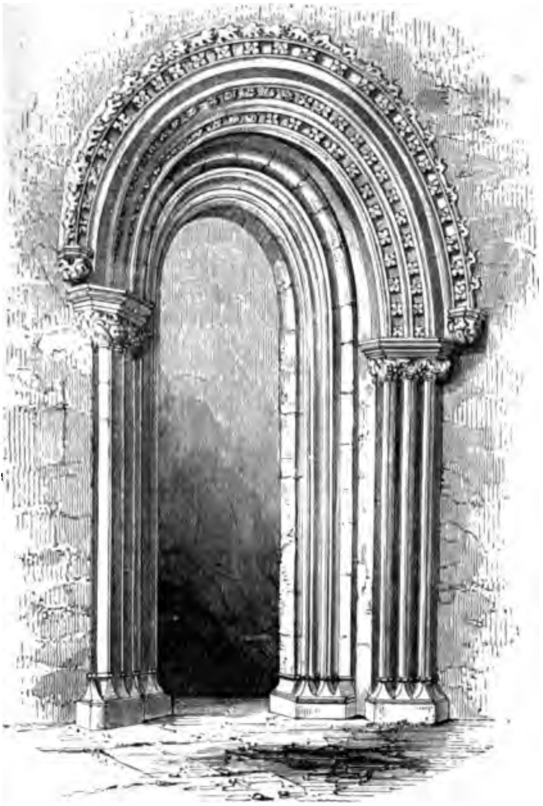


656 Window at Dunkeld (restored).



657. Doorway, Linlithgow.

round-arched style, very like what Durham Cathedral would have been had it been intended (as this was) for a wooden roof. The other parts display that intermixture of styles so usual in monastic buildings; bold billeted arches, as in Woodcut No. 655, being surmounted by vaults of a much later date. But Scotch vaulting was in general so massive and rich that it requires the eye of an archæologist to detect a difference that is never offensive to the true artist. Among the remaining specimens are Dumblane, Aberbrothock, Arbroath, and Dunkeld, a window of which (Woodcut No. 656) is a fine specimen of the Scotch flamboyant, identical in design with one still existing in Linlithgow parish church, and very similar to many found elsewhere. The west doorway in the last-named church is a pleasing specimen of the half Continental[1] manner in which that feature was usually treated in Scotland.



658. Doorway, St. Giles's, Edinburgh.

It has already been hinted that the Scotch unwillingly abandoned the circular archway, especially as a decorative feature, and that they indeed retain it occasionally thoughout the whole of the Middle Ages, though with the details of the period. The doorway illustrated in Woodcut No. 658, from Saint Giles's, Edinburgh, is a fine specimen of this mode of treatment, and so is the next illustration, from Pluscardine Abbey. Similar doorways

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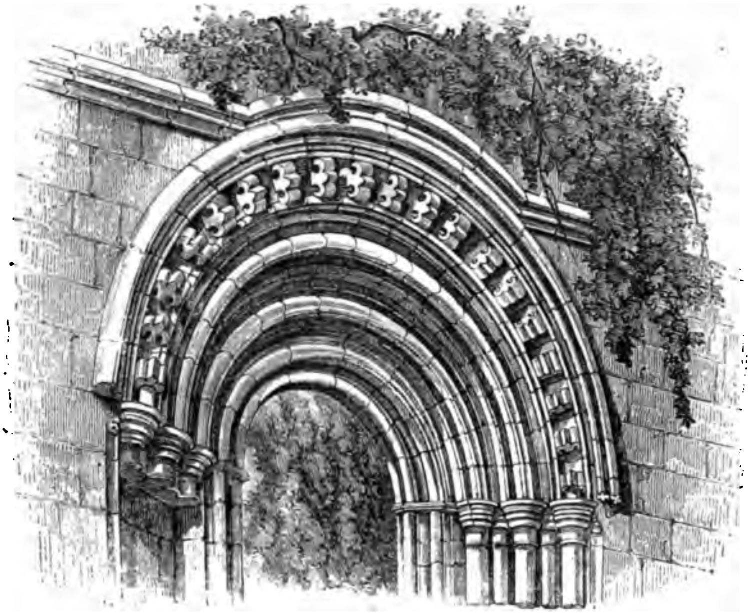
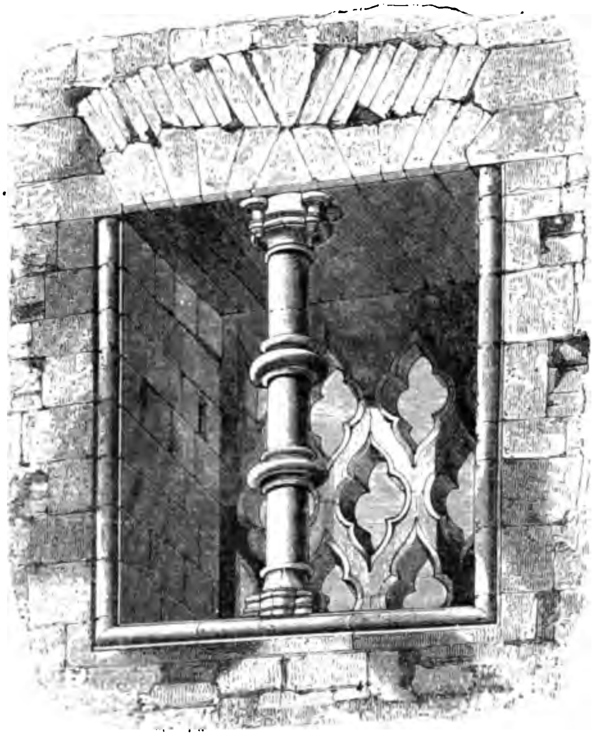
[1] The same class of tracery is found in the Lamberti Kirche at Munster, and generally in Westphalia; some specimens being almost absolutely identical with the Scotch examples.

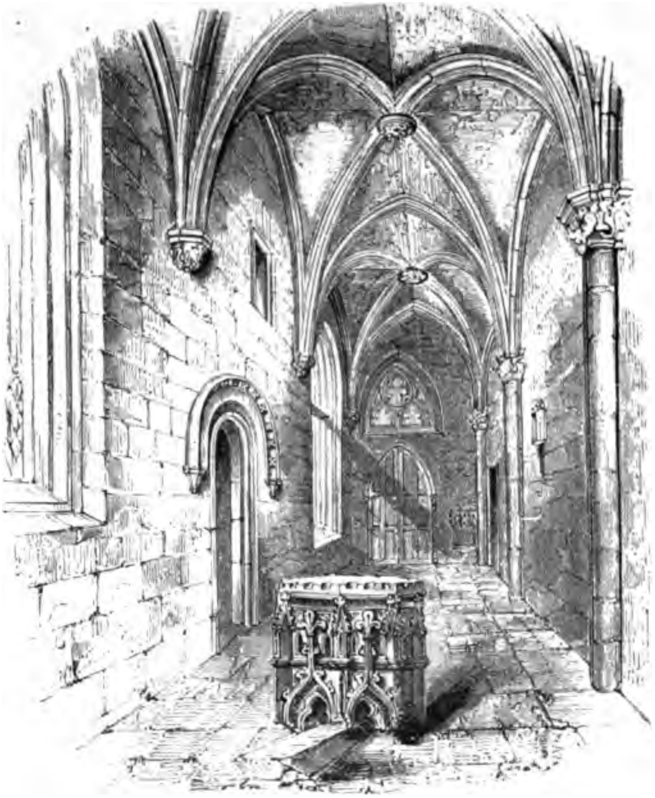


659. Doorway, Pluscardine Abbey.



660. Window in Tower, Iona.

occur at Melrose and elsewhere. For canopies of tombs and suchlike purposes, the circular arch is almost as common as the pointed. Other examples are found at Iona, though there the buildings are nearly as exceptional and Continental in design as Roslyn itself—the circular pier-arch is used with the mouldings of the 13th century, and the pointed arch is placed on a capital of intertwined dragons, more worthy of a Runic cross or tombstone than a Gothic edifice. The tower windows are filled with a quatrefoil tracery (Woodcut No. 660), in a manner very unusual, and a mode of construction is adopted which does not perhaps exist anywhere else in Britain. The whole group, in fact, is as exceptional as its situation, and as remote from the usual modes of architecture on the mainland.



661. Aisle in Trinity Church, Edinburgh.

The early Scotch vaults, as already mentioned, were singularly bold and massive, and all their mouldings were characterised by strength and vigour, as shown in the examples taken from Glasgow and Dunfermline (Woodcuts Nos. 640, 655). At a later period, however, when the English were using perpendicular tracery, and when the invention of fan-vaulting was beginning to be introduced, the Scotch, with the flamboyant tracery of the French, adopted also their weak and unconstructive modes of vaulting. It is not uncommon to find as poor a vault as that of the lately destroyed Trinity College Church, Edinburgh (Woodcut No. 661), erected contemporaneously with the elaborate vaulting of the royal chapels in England; and not only in this but in every other respect it is to the Continent, and not to their nearest neighbours, that we must at this late period look for analogies with the architecture of the Scotch.

Scotland is, generally speaking, very deficient in objects of civil or domestic architecture belonging to the Middle Ages. Of her palaces, Holyrood was almost rebuilt in the reign of Charles I., and Edinburgh Castle entirely remodelled. Stirling still retains some fragments of ancient art, and Falkland seems on the verge of the Renaissance. Linlithgow perhaps alone remains in its original state, a fine specimen of a fortified palace, with bold flanking towers externally, and a noble courtyard in the centre.

There are, besides these, numberless square towers and fortalices scattered over the country, which were the residences of the turbulent barons of Scotland during the Middle Ages; but none of these can properly be called objects of architecture.

The baronial edifices of the succeeding age give the impression of belonging to an earlier style, which was retained in this wild country long after it had been laid aside elsewhere. They are as remarkable as any class of buildings erected after the Middle Ages, both for originality and picturesqueness. But they were, with scarcely an exception, built after the accession of Elizabeth to the throne of England, and all, when closely examined, display features belonging to the Renaissance style. Their description would therefore be more appropriate in a subsequent volume than in a chapter devoted to the Gothic architecture of Scotland.

CHAPTER V.

IRELAND.

CONTENTS.

Oratories — Round Towers — Domical Dwellings — Domestic Architecture— Decorations.

THE history of architecture in Ireland forms as distinct a contrast to that of Scotland as it is possible to conceive. At a very early period the Irish showed themselves not only capable of inventing a style for themselves, but perfectly competent to carry it to a successful issue, had an opportunity ever been afforded them. But this has not yet happened. Before the English conquest (1169) the country seems to have been divided into a number of small states, whose chieftains occupied the scant leisure left them between the incursions of the Danes and other Northmen, in little wars among themselves. These were never of such importance as to yield glory to either party, though amply sufficient to retard the increase of population and to banish that peace and sense of security which are indispensable for the cultivation of the softer arts. Yet during that period the Irish built round towers and oratories of a beauty of form and with an elegance of detail that charms even at the present day. Their metal work showed a true appreciation of the nature of the material, and an artistic feeling equal in kind, if not in degree, to anything in the best ages of Greece or Italy; and their manuscripts and paintings exhibit an amount of taste which was evidently capable of anything.

After the conquest, the English introduced their own pointed architecture, and built two churches in Dublin which, in dimensions and detail, differ very little from English parish churches. But beyond the Pale their influence was hardly felt. Whatever was done was stamped with a character so distinctly Irish as to show how strong the feeling of the people was; and sufficient to prove, with our knowledge of their antecedents, how earnestly and how successfully they would have laboured in the field of art had circumstances been favourable to its development. For seven centuries, however, the two races have lived together, hating and hated, and neither capable of comprehending the motives or appreciating the feelings of the other. It was not that the Saxon was tyrannical or unjust, but that he was prosaic among a people whose imagination too often supplied the place of reason, and that he was strong among those who could not combine for any steady purpose. His real crime was that, like the leopard, he could not change his spots. He belonged to a different race, and the Irish have always chosen to cherish the idea of vengeance and suffer the derangement consequent on it, rather than enjoy peace and prosperity under those they hated. Art is a plant too tender to flourish in the garden of hatred, and it has consequently been long banished from Irish soil, though, under gentler influences, it is probable that it might be more easily revived and more successfully cultivated there than in any other part of the British Isles.

Whatever may be the fate of art in Ireland for the future, the history of the past is sufficiently discouraging.

The cathedral of Dublin must always have been a second-class edifice for a metropolitan church, and those of Cashel and Kildare, which are as celebrated and as important as any in Ireland, are neither so large nor so richly ornamented as many English parish churches. The cathedral of Lismore has entirely disappeared; and generally it may be asserted that, throughout the country, there is not one cathedral church remarkable for architectural beauty or magnificence, though many are interesting from their associations, and picturesque from the state of ivy-clad ruin in which they appear.

The same is true with regard to the monasteries—they are numerous; and many, though small, are rich in detail. One of the most elaborate is that of the Holy Cross near Cashel, erected in the 15th century. This, like every other building of the Gothic period in Ireland, shows a strong affinity to the styles of the Continent, and a clearly marked difference from those of this country.

Some of the monasteries still retain their cloisters, which, in all instances, have so foreign an aspect as to be quite startling. That at Muckross (Killarney) retains the round arch on two sides with the details of the 15th century. That at Kilconnel (Woodcut No. 662)[1] looks more like a cloister in Sicily or Spain than anything in the British Islands. None of them seem large. The last named is only 48 ft. square, though, if more extensive, it would be out of place compared with the rest of the establishment.

There is scarcely a single parish church of any importance which was built in Ireland beyond the limits of the Pale during the Middle Ages, nor, indeed, could it be expected that there should be. The parochial system is singularly unsuited to the Celtic mind at all times, and, during the Gothic period, the state of Ireland was especially unfavourable to its development, even if any desire for it had existed. What the Celt desiderates is a hierarchy who will take the trouble of his spiritual cares off his hands, and a retreat to which he can retire for repose when the excitement of imagination no longer suffices to supply his daily intellectual wants. These may lead to a considerable development of cathedral and monastic establishments, but not to that self-governing parish system which is so congenial to the Saxon mind.

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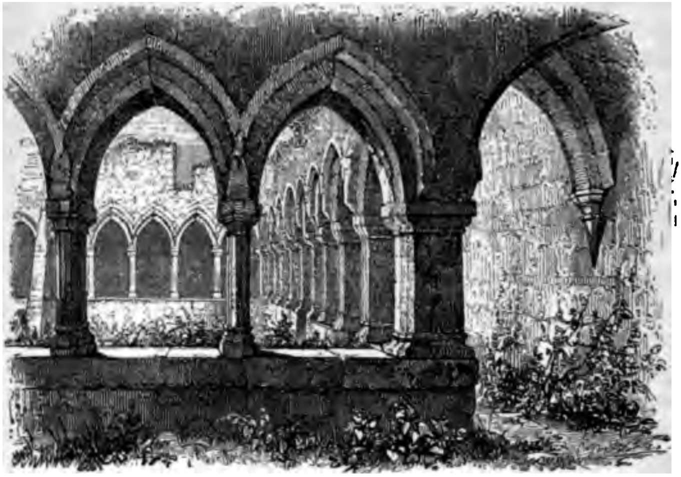
[1] The woodcuts in this chapter are, with one or two exceptions, borrowed from Wilkinson's 'Ancient Architecture and Geology of Ireland."

View it as we will, the study of Gothic architecture in Ireland is a melancholy one, and only too truly confirms what we know from other sources. It does not even help us to answer the question whether or not Ireland could successfully have governed herself if left alone. All it does tell us is that, from the accidental juxtaposition of two antagonistic races, one of them has certainly failed hitherto in fulfilling the artistic mission which, under favourable circumstances, it seems eminently qualified to perform.



662. Cloister, Kilconnel Abbey.

From these causes, the Gothic antiquities of Ireland would not deserve much notice in a work not specially devoted to that one subject, were it not that, besides these, Ireland possesses what may properly be called a Celtic style of architecture, which is as interesting in itself as any of the minor local styles of any part of the world, and, so far as at present known, is quite peculiar to the island. None of the buildings of this style are large, though the ornaments on many of them are of great beauty and elegance. Their chief interest lies in their singularly local character, and in their age, which probably extends from the 5th or 6th century to the time of the English conquest in 1169. They consist principally of churches and round towers, together with crosses and a number of other antiquities hardly coming within the scope of this work.

No Irish church of that period now remaining is perhaps even 60 ft.

in length, and generally they are very much smaller, the most common dimensions being from 20 to 40 ft. long. Increase of magnificence was sought to be attained more by extending the number of churches than by augmenting their size. The favourite number for a complete ecclesiastical establishment was 7, as in Greece and Asia Minor, this number being identical with that of the 7 Apocalyptic Churches of Asia. Thus, there are 7 at Glendalough and 7 at Cashel; the same sacred number is found in several other places,[1] and generally two or three at least are found grouped together.

As in Greece, too, the smallness of the churches is remarkable. They were not places for the assembly of large congregations of worshippers, but were oratories, where the priest could celebrate the divine mysteries for the benefit of the laity. In fact, no church is known to have existed in Ireland before the Norman Conquest that can be called a basilica, none of them being divided into aisles either by stone or wooden pillars, or possessing an apse, and no circular church has yet been found—nothing, in short, that would lead us to believe that Ireland obtained her architecture direct from Rome; while everything, on the contrary, tends to confirm the belief of an intimate connection with the farther East, and that her earlier Christianity and religious forms were derived from the East, by some of the more southerly commercial routes which at that period seem to have touched on Ireland.

A good deal of uncertainty and even of ridicule has been thrown on the subject of the Eastern origin of the Irish Church by the extreme enthusiasm of its advocates, but there seems to be no reasonable ground for doubting the fact. At all events, it may safely be asserted that the Christian religion did not reach Ireland across Great Britain, or by any of the ordinary channels through the Continent. As a corollary to this, we must not look for the origin of her architectural styles either in England or in France, but in some more remote locality whose antiquities have not yet been so investigated as to enable us to point it out as the source whence they were derived.

The Irish Celtic churches are generally rectangular apartments, a little longer than they are broad, like the small one on the island of Innisfallen on the lake of Killarney (Woodcut No. 663). To the larger churches a smaller apartment of the same proportions is added to the eastward, forming a chancel, with an ornamental arch between the two.

The most remarkable of these now existing is that known as Cormac's Chapel, on the rock at Cashel (Woodcut No. 664), which was consecrated in the year 1134. It is a small building, 55 ft. long over all externally. The chancel is 12 ft. square internally, covered with an intersecting vault; the nave is 18 ft. by 29, and covered by a tunnel-vault with transverse ribs, very like those found in the South of France. Externally, as shown in the view, it has two square towers attached to it at the juncture of the nave and chancel, while the church itself is richly ornamented by a panelling of small arches.

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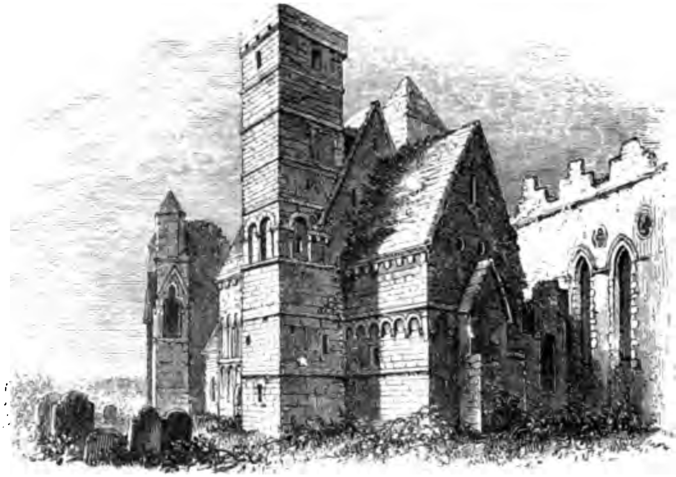
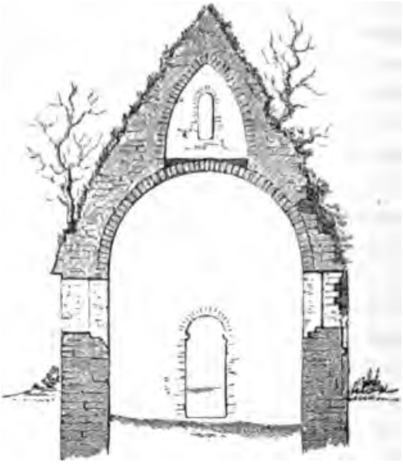
[1] Seven churches are also found at Scattery and Innis Caltra in Clare, Tory Island, Donegal, Rattoo in Kerry, Inchclorin, Longford, and Arranmore in Galway.

663. Oratory, Innisfallen, Killarney.



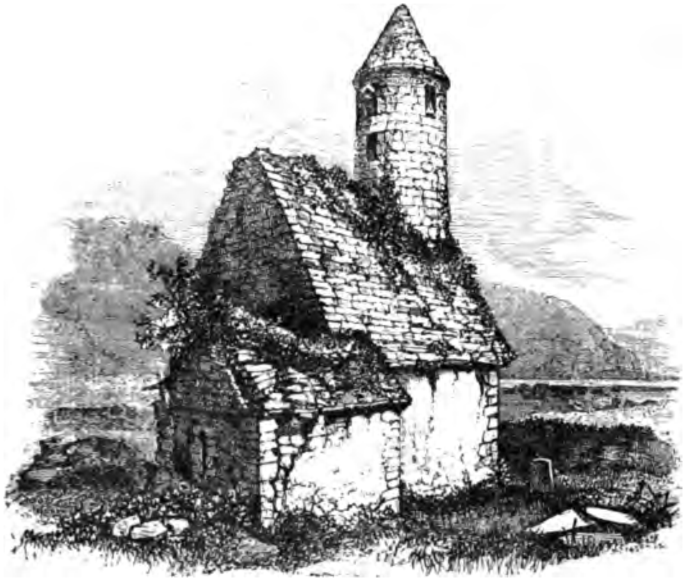
664. Cormac's Chapel, Cashel.

In almost all cases the principal entrance to these churches is from the west, opposite to the altar. The chapel at Cashel is, however, an exception, since it has both a north and a south entrance. That on the north is the principal, and very richly ornamented. The same is the case at Ardmore, where the whole of the west end is taken up by a bas-relief rudely representing scenes from the Bible, and the entrance is on the north side of the nave. On these principal entrances all the resources of art were brought to bear, the windows generally being very small, and apparently never glazed. There is a doorway at Freshford in Kilkenny, and another at Aghadoe near Killarney, which for elegance of detail will bear comparison with anything in England or on the Continent of the same age.



665. Section of Chapel, Killaloe.

One of the peculiarities of these churches is, that they were nearly all designed to have stone roofs, no wood being used in their construction. The annexed section (Woodcut No. 665) of the old church at Killaloe, belonging probably to the 10th century, will explain how this was generally managed. The nave was roofed with a tunnel-vault of the ordinary form; over this is a chamber formed by a pointed arch, and on the outside of these two, the roofing slabs were laid. Sometimes, instead of being continuous, the upper vault was cut into ribs, and the roof built up



666. St. Kevin's Kitchen, Glendalough.

straight externally, with horizontal courses resting on these ribs. This mode of double roofing was, perhaps, a complication, and no improvement on that adopted in the South of France in the same age (Woodcuts Nos. 312, 319), but it enabled the Irish to make the roof steeper than could be effected with a single vault, and in so rainy a climate this may have been of the first importance.

The roof of the Cashel Chapel is of this double construction; so is the building called "St. Kevin's Kitchen" at Glendalough (Woodcut No. 666), which apparently belongs to the 7th century. There is another very similar at Kells, and several others in various parts of Ireland, all displaying the same peculiarity.

Had the Irish been allowed to persevere in the elaboration of their own style, they would probably have applied this expedient to the roofing of larger buildings than they ever attempted, and might, in so doing, have avoided the greatest fault of Gothic architecture. Without more experience, it is impossible to pronounce to what extent the method might have been carried with safety, or to say whether the Irish double vault is a better constructive form than the single Romance pointed arch. It was certainly an improvement on the wooden roof of the true Gothic style, and its early abandonment is consequently much to be regretted.

ROUND TOWERS AND ORATORIES.

The round towers which accompany these ancient churches have long proved a stumbling-block to antiquaries, not only in Ireland but in this country; and more has been written about them, and more theories proposed to account for their peculiarities, than about any other objects of their class in Europe.

The controversy has been, to a considerable extent, set at rest by the late Mr. George Petrie.[1] He has proved beyond all cavil that the greater number of the towers now existing were built by Christians, and for Christian purposes, between the 5th and 13th centuries; and has shown that there is no reasonable ground for supposing the remainder to be either of a different age or erected for different uses.

Another step has recently been made by Mr. Hodder Westropp, who has pointed out their similarity with the Fanal de Cimetière, so frequently found in France,[2] and even in Austria (Woodcut No. 530).

To anyone who is familiar with the Eastern practice of lighting lamps at night in cemeteries or in the tombs of saints, this suggestion seems singularly plausible when coupled with the knowledge that the custom did prevail on the Continent in the Middle Ages. It is, however, far from being a complete explanation, since many of these towers have only one or two very small openings in their upper storey; and there is also the staggering fact that this use is not mentioned in any legendary or written account of them which has come down to our time. On the other hand, they are frequently described as bell-towers, and also as treasuries and places of refuge, and seem even better adapted to these purposes than to that of displaying lights.

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[1] 'The Ecclesiastical Architecture of Ireland anterior to the Anglo-Norman Invasion.' Dublin, 1845.

[2] See Viollet le Duc, 'Dictionnaire d'Architecture,' *sub voce.*

That they may have been applied to all these purposes seems clear, but a knowledge of their use does not explain their origin; it only removes the difficulty a step farther back. No attempt has been made to show whence the Irish obtained this very remarkable form of tower, or why they persevered so long in its use, with peculiarities not found either in the contemporary churches or in any other of their buildings. No one imagines it to have been invented by the rude builders of the early churches, and no theory yet proposed accounts for the perseverance of the Irish in its employment, at a time when the practice of all the other nations of Europe was so widely different. It must have been a sacred and time-honoured form somewhere, and with some people, previous to its current adoption in Ireland; but the place and the time at which it was so, still remain to be determined.[1]

Although, therefore, Mr. Petrie's writings and recent investigations have considerably narrowed the grounds of the inquiry, they cannot be said to have set the question at rest, and anyone who has

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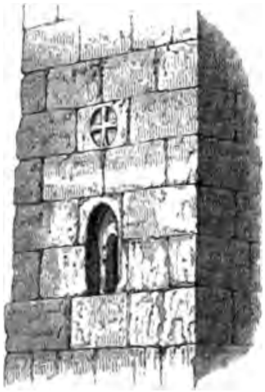
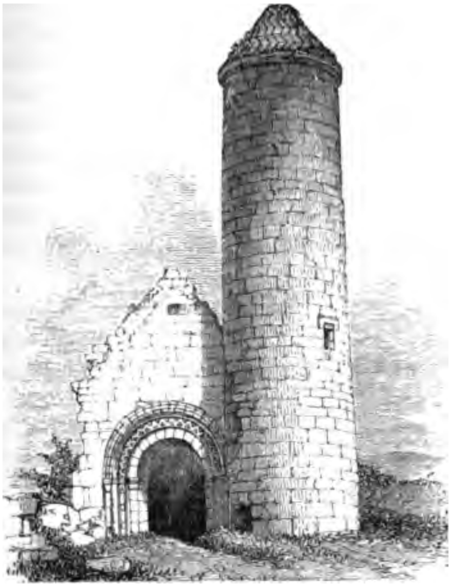
[1] One of the towers in the East that bears most directly on the history of these Irish towers is that discovered by Dr. Tristram near Um Rasas. It is described and figured at page 145 in his work on the 'Land of Moab;' but unfortunately the woodcut is taken from the side that does not represent the doorway with the cross over it so like that at Antrim (Woodcut No. 671), and elsewhere. Like most of the Irish examples, it is situated at about 10 ft. from the ground. There is no other opening to the tower, except one on each face at the top. It has also the peculiarity that it stands free but close to a small cell or chapel, as is the case with almost all the Irish towers. The one point in which it differs from the Irish examples is that its plan is square instead of being circular. This does not seem so important as it at first sight may appear, seeing how many circular minarets were afterwards erected in the East, which must have had a model somewhere. Practically, therefore, this Moabite tower may be described, Hibernicè, as a square Irish round tower.

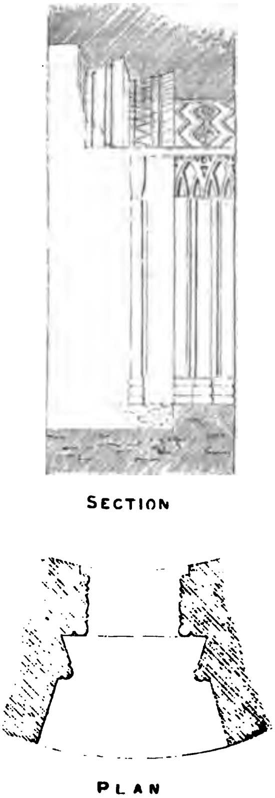


667. Doorway in Tower at Um Rasas. (From a Photograph.)

seen the towers must feel that there is still room for any amount of speculation regarding such peculiar monuments.

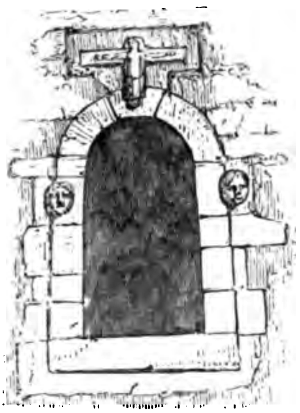
In nine cases out of ten they are placed unsymmetrically at some little distance from the churches to which they belong, and are generally of a different age and different style of masonry. Their openings, from the oldest to the most modern, generally have sloping jambs, which are very rare in the churches, being only found in the earliest examples. Their doorways are always at a height of 7, 10, or 13 ft. from the ground, while the church doors are, it need hardly be said, always on the ground level. But more than all this, there is an unfamiliar aspect about every detail of the towers which is never observed in the churches. The latter may be rude, or may be highly finished, but they never have the strange and foreign appearance which the towers always present.


668. Round Tower and Chancel Arch of Fineans Chapel, Clonmacnoise.

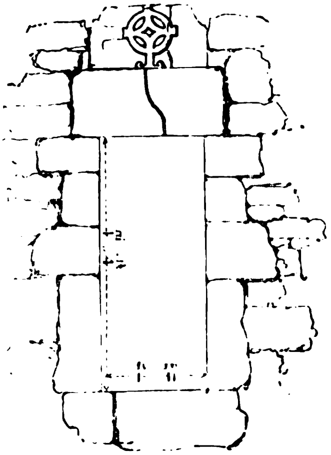


669. Doorway in Tower, Kildare.

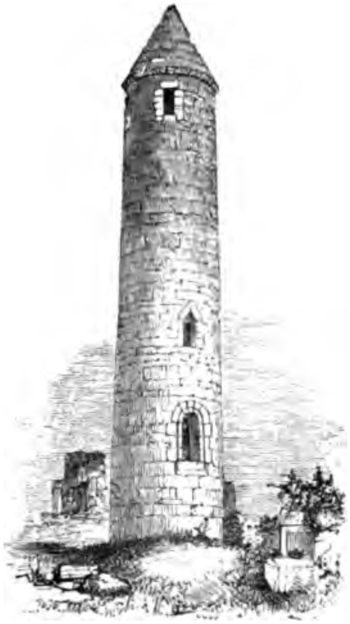
Notwithstanding this, the proof of their Christian origin is in most cases easy. Woodcut No. 666, for instance, shows a round tower placed *upon* what is, undoubtedly, a Christian chapel, and which must consequently be either coeval with the tower or more ancient. At Clonmacnoise (Woodcut No. 668) the masonry of the tower is bonded with the walls of the church, and evidently coeval therewith, the chancel arch being undoubtedly Christian round Gothic of the 10th or 11th century. At Kildare the doorway of the tower (Woodcut No. 669) is likewise of unquestionable Christian art, and an integral part of the design, though it may be somewhat earlier than the foregoing; and at Timahoe the doorway of the tower



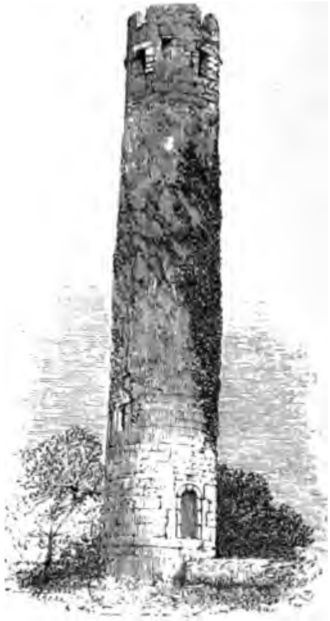
670. Doorway in Tower, Donoughmore, Meath.



671. Doorway in Tower, Antrim.

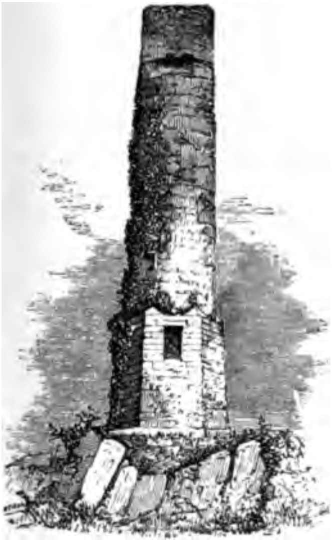


672. Tower, Devenish.

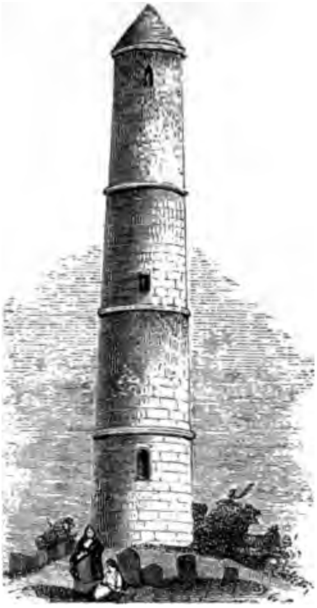


673. Tower, Kilree, Kilkenny.

is richer and more elaborate, but at the same time of a style so closely resembling that of Cormac's Chapel as to leave no doubt of their being nearly of the same age. The only remarkable difference is that the jambs of the doorway of the tower slope considerably inwards, while all those of the chapel are perfectly perpendicular. Another proof of their age is, that many of the doorways have Christian emblems carved *in relief* on their lintels, as in the example from the tower at Donoughmore (Woodcut No. 670), or that from Antrim (Woodcut No. 671), or on the round tower at **Brechin** in Scotland,—emblems which, from their position, and the fact of their being in relief, cannot have been added, and must therefore be considered as original. When we find that the towers which have not these indications differ in no other respect from those that have, it is impossible to resist the conclusion that they too are of Christian origin; the positive evidence of a few being sufficient to overbalance the mere absence of proof in a far greater number.



674. Tower, Keneith, Cork.

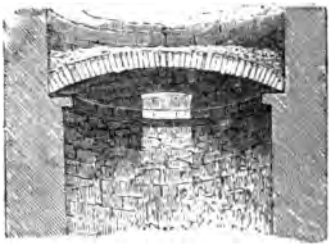


675. Tower, Ardmore.

Antiquaries have enumerated 118 of these monuments as still to be found in Ireland; of these some 20 are perfect, or nearly so, varying in height from about 60 ft. to 130 ft., which is the height of the imperfect one at Old Kilcullen. They all taper upwards towards the summit, and are generally crowned with a conical cap like that at Clonmacnoise (Woodcut No. 668), though not often constructed in the herring-bone masonry there shown.

The tower of Devenish (Woodcut No. 672) may be taken as a typical example of the class. It is 82 ft. high, with a conical cap, and its doorway and windows are all of the form and in the position most usually found in monuments of this class. The conical cap is frequently omitted and its place supplied by a battlemented crown; this is the case at Kildare, and also at Kilree (Woodcut No. 673). In one instance, and, I believe, one only, the base of the tower is octagonal. This is found at Keneith, county Cork (Woodcut No. 674).[1]

One of the most beautiful and most perfect is that of Ardmore (Woodcut No. 675). It is of excellent ashlar masonry throughout, and is divided externally into 4 storeys by string-courses, which do not, however, mark the position of the floors inside. Its mouldings and details lead to the presumption that it is nearly coeval with Cormac's Chapel, Cashel, and that consequently it must belong to the 12th century. It stands within the precincts of the rude old church mentioned above, and when explored not long ago the skeletons of two persons were found below its foundations, placed in such a manner as to lead to the inevitable conclusion that it was a place of Christian burial before the foundations of the tower were laid.


676. Floor in Tower, Keneith.

The floors which divide the tower into storeys are generally of wood, but sometimes of masonry, constructed as that at Keneith (Woodcut No. 676). There are no stairs, but ladders are used to pass from one storey to the next.

Several instances of doorways have been quoted above. Of these no two are exactly alike, though all show the same general characteristics. That at Monasterboice, for instance (Woodcut No. 677), has an arch cut out of a horizontal lintel extending the whole way across, while that at Kilcullen (Woodcut No. 678) has the arch cut out of two stones, which is by far the most usual arrangement.

The windows are generally headed with two stones meeting at the apex, as in the three examples given below (Woodcut No. 679); but sometimes the window-head is either a flat lintel or a single stone cut into the form of an arch, as at Glendalough (Woodcut No. 680).

Though these remarkable towers are of extremely various forms, differing according to their age and locality, almost all exhibit that peculiar Cyclopean character of masonry which has led to such strange, though often plausible, speculations; for though neither their details nor their masonry would excite remark if found at Norba in Latium or at Æniadæ in Acarnania, yet here they stand alone and exceptional to everything around them.

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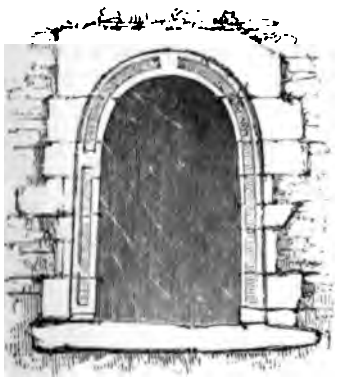
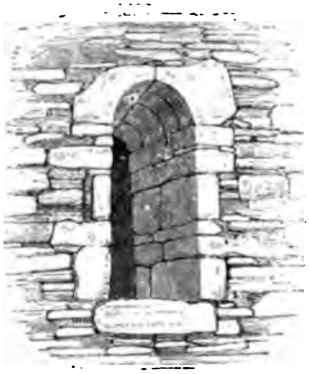
[1] Compare this with the contemporary tower at Ghazni, in the chapters on Saracenic Architecture in India in vol. iii.

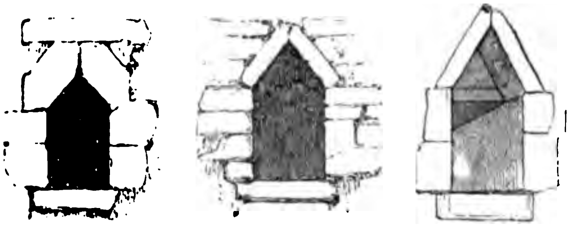
Whatever may have been their origin, there can be no doubt as to the uses to which they were applied by the Christians—they were symbols of power and marks of dignity. They were also bell-towers, and lamps were possibly lighted in them in honour of the dead. But perhaps their most important use was that of keeps or fortalices; to which, in troubled times, the church plate and other articles of value could be removed and kept in safety till danger was past.



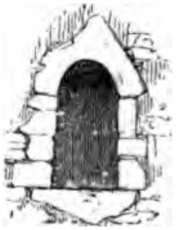
677. Doorway, Monasterboice.



678. Doorway, Kilcullen, Kildare.



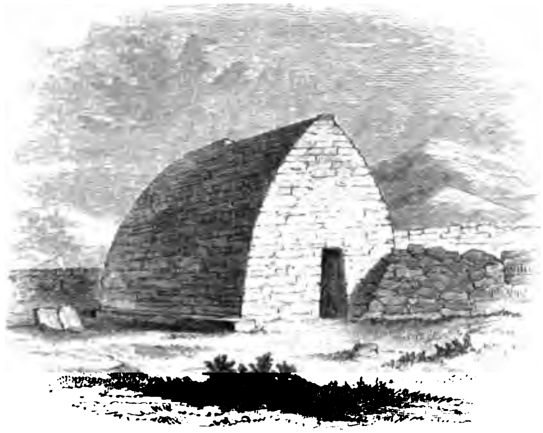
679. Windows in Round Towers.



680. Window, Glendalough.

As architectural objects these towers are singularly pleasing. Their outline is always graceful, and the simplicity of their form is such as to give the utmost value to their dimensions. Few can believe that they are hardly larger than the pillars of many porticoes, and that it is to their design alone that they owe that appearance of size they all present. No one can see them without admiring them for these qualities, though the peculiar fascination they possess is no doubt in great measure owing to the mystery which still hangs round their origin, and to the association of locality. In almost every instance the tower stands alone and erect beside the ruins of an ancient but deserted church, and among the mouldering tombstones of a neglected or desecrated graveyard. In a town or amid the busy haunts of men, they would lose half their charm; situated as they are, they are among the most interesting of the antiquities of Europe.

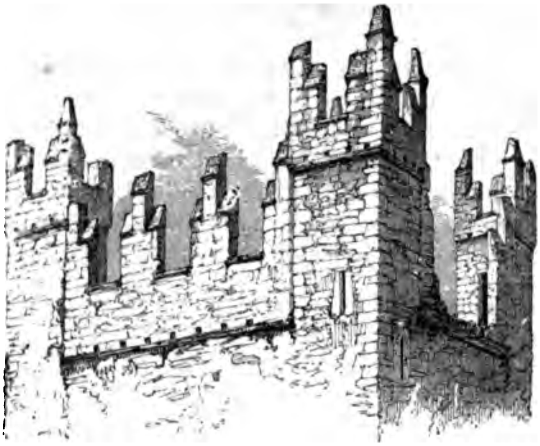
There is still another class of antiquities in Ireland, older perhaps than even these round towers, and certainly older than the churches to which the towers are attached. These are the circular domical dwellings found in the west of the island, constructed of loose stones in horizontal layers approaching one another till they meet at the apex, like the old so-called treasuries of the Greeks, or the domes of the Jains in India. Numbers of these are still to be found in remote



681. Oratory of Gallerus. (From Petrie's 'Ancient Architecture of Ireland.')

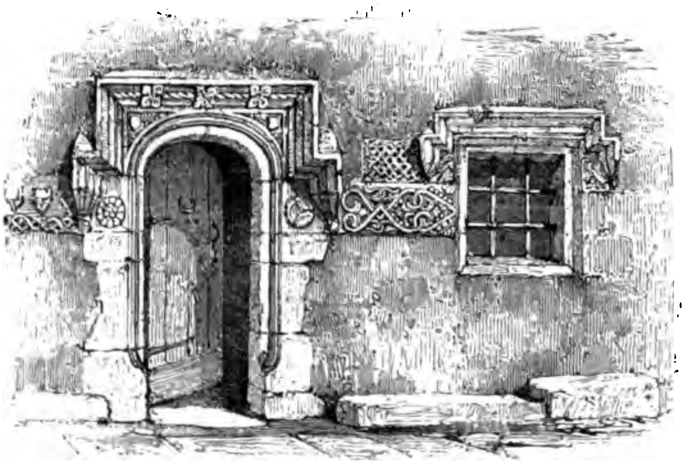
parts, sometimes accompanied by what are properly called oratories, like that shown in Woodcut No. 681, taken from Mr. Petrie's valuable work. It is certainly one of the oldest places of worship in these islands, belonging probably to the age of St. Patrick; and it is also one of the smallest, being externally only 23 ft. by 10. It shows the strange Cyclopean masonry, the sloping doorway, the stone roof, and many of the elements of the subsequent style, and it is at the same time so like some things in Lycia and in India, and so unlike almost any other building in Europe, that it is not to be wondered at that antiquaries should indulge in somewhat speculative fancies in endeavouring to account for such remarkable phenomena.

Ireland is not rich in specimens of domestic architecture of the Middle Ages, but such fragments as do exist show marked variations from the contemporary style in England. Such battlements, for instance, as those which crown the tower of Jerpoint Abbey are identical with many found in the North of Italy, but very unlike anything either in England or Scotland, and give a foreign look to the whole building which is very striking.



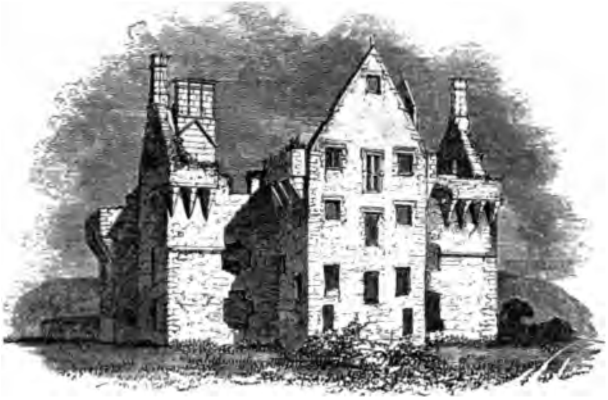
682. Tower, Jerpoint Abbey.

The same may be said of the next example (Woodcut No. 683) from a house in Galway. Its architecture might be Spanish, but its ornamental details look like a reminiscence of the entwined decoration of a Runic cross. From whatever source they are derived, it certainly was not England.



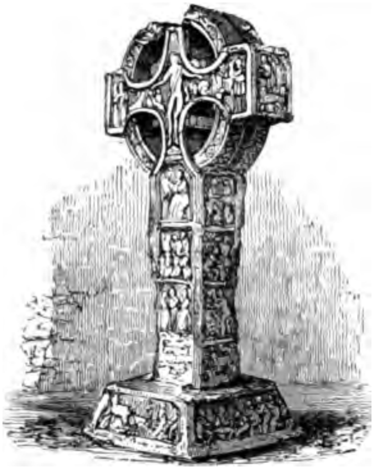
683. House, Galway.

Ballyromney Court, illustrated in Woodcut No. 684, is perhaps the most usual form of an Irish mansion in the last age of Gothic. After its time the Elizabethan became the prevalent style. All individuality vanished with the more complete subjection of the country in the reign of that queen. This is, no doubt, to be regretted; but,



684. Ballyromney Court, Cork.

as before remarked, Ireland is interesting, not for her Gothic so much as for her Celtic antiquities, the epoch of which closed as nearly as may be with the English conquest in 1169.



685. Cross at Kels.

BOOK VII.

SPAIN AND PORTUGAL.

CHAPTER I.

INTRODUCTORY.

SPAIN.

INTRODUCTION.

CHRONOLOGY.

	DATES.
Gothic conquest—Athaulf	A.D. 411
Moorish conquest	711
Kingdoms of Navarre and Arragon established, about	760
Sancho I., King of Castille	1005
Alphonso VI. unites all Northern Spain into one kingdom	1072
Henry de Besançon—foundation of kingdom of Portugal	1095
Alphonso III.—conquest of Toledo	A.D. 1085
Conquest of Cordova	1226
„ „ Valencia	1238
„ „ Seville and Murcia	1243
Ferdinand el Santo died	1252
Alonso el Sabio	1252–1284
Pedro the Cruel	1350–1369
Ferdinand and Isabella	1474–1516
Conquest of Granada	1492

Spain is one of those countries regarding the architecture of which it is almost as difficult to write anything consecutive as regarding that of Scotland. This does not arise from the paucity of examples nor from their not having been examined and described, but from the same cause as was insisted upon in speaking of Scotch art, that the style was not indigenous, but borrowed from other nations, and consequently practised far more capriciously than if it had been elaborated by the Spaniards themselves.

In the very early ages of their architectural history we do find the inhabitants of the Peninsula making rude attempts to provide themselves with churches. These, however, were so unsuited for their purposes that so soon as returning prosperity put the Spaniards in a position to erect larger edifices, they at once fell into the arms of the French architects, who had advanced far beyond them in the adaptation of classical materials to Christian purposes. When tired of the French styles, they enlisted the Germans to assist them in supplying their wants, and Italy also contributed her influence, though less directly than the other two. In the mean time the Moors were more steadily elaborating their very ornate but rather flimsy style of art in the southern part of the Peninsula, and occasionally contributed workmen and ideas whose influence may be traced almost to the foot of the Pyrenees. When all this passed away with the Middle Ages, they borrowed the Renaissance style of the Italians, but used its Doric and Corinthian details more literally and with less adaptation than any other nation. With these classical materials they erected churches which were larger and more gorgeous than those of the previous styles, and admired them with the same unreasoning devotion they had bestowed on their predecessors.

So far as we at present know, this peculiarity is unique in the history of architecture. Some nations are content to worship in barns, or to dispense with temples altogether. It is not, therefore, surprising that they should have no architecture, or should throw it aside as the Scotch did the moment they could shake off its trammels. But the Spaniards loved art. They delighted in the display of architectural magnificence, and indulged in pomp and ceremonial observances beyond any other people on the Continent.

The singularity is, that though endowed with the love of architecture, and an intense desire to possess its products, nature seems to have denied to the Spaniard the inventive faculty necessary to enable him to supply himself with the productions so indispensable to his intellectual nature. We can perfectly understand how, among so Teutonic a people as the Scotch, architecture should be found planted in an uncongenial soil and perish with the first blast of winter; but what seems unique is that, planted where both the soil and climate seem so thoroughly congenial as they do in Spain, it should still remain exotic and refuse to be acclimatised.

If we knew who the Spaniards were we might be able to explain these phenomena, but we know so little of the ethnography of Spain that at present this source of information is not available. The term "Iberian" hardly conveys a distinct idea to the mind. The first impulse is to say they must have been Turanian; but, if so, where are their tombs? Few tumuli or rude-stone monuments exist in Spain, and fewer traces of sepulchral rites or ancestral worship, and these have been so imperfectly described that it is difficult to reason regarding them, but unless they do exist we are safe in asserting that no Turanian people lived in historic times in Spain. From history we know that the Phœnicians occupied the coast-line at least all round the southern part of the Peninsula, and their settlements probably penetrated some way into the interior. The facility with which the Moors conquered and colonised the country, is in itself sufficient to prove that a people of cognate race had occupied the land long before they came there; but this hardly helps us, for neither the Phœnicians nor any of the Semitic races were ever builders, and we look in vain in Spain or at Carthage, or at Tyre or Sidon, for anything to tell us what their architecture may have been. The Goths who invaded Spain in the beginning of the 5th century must have been of Teutonic race, Aryans *pur sang*, for they have not left a building or a tradition of one, and they therefore can hardly have influenced the style of their successors in the Peninsula. Even the Moors were scarcely an architectural people in the proper sense of the term. Their mosques were, so far as we know them, made up of fragments of classical temples arranged without art or design. Their palaces were ornamented with plaster work of the most admired complexity of design, coloured with the most exquisite harmony; but all this was the work of the ornamentalist, hardly of the architect. It was perfectly suited to the wants of an elegant and refined Oriental race, but most ill adapted to the wants of a hardy race of mountaineers struggling for freedom against the invaders of their birthright. The Celtic element must have been the one wanting in this "olla podrida" of nations to fuse the whole together, and to give the arts that impulse which in Spain was always wanting. All the other elements they seem to have possessed, but the absence of this single one prevented them from attaining that unity which would enable us to follow their story with the same interest which we feel in tracing the development of the arts in France or England. Notwithstanding this, however, it must be confessed that the result in Spain is frequently grand, and even gorgeous, though never quite satisfactory.

The periods of Gothic architecture in Spain coincide in age very nearly with those in this country; far more nearly than with France or Italy, or any other nation. Before the era of the Cid (1066–1099), which was coincident with that of William the Conqueror, there existed a style similar in importance and character to our Saxon style. This the Spaniards call "obras de los Godos," and the term may be practically correct, but it would confuse our nomenclature to call it the "Gothic" of Spain. "Asturian" or "Catalonian" might nearly describe it, but for the present some such indefinite description as "Early Spanish" must suffice.

In the latter half of the 11th century it was overwhelmed, as in this country, by a wholesale importation of French designs. These continued to be employed, as if no Pyrenees existed, for about a century, with the round arch in all the decorative features, but with an occasional tendency to employ the pointed arch in construction.

By degrees this round-arched style grew into an early pointed Spanish, which, like our own lancet, is more national and more characteristic than any other phase of the art, and, like it, seems to have been more cherished and for a longer time. In the beginning of the 13th century a new set of French patterns were introduced; but while French cathedrals with geometric tracery were being erected at Toledo, Burgos, and Leon, in the provinces they continued to adhere to the simpler and more solid forms of the earlier style.

During the 14th century the French style reigned supreme, with only a slight touch of local feeling and a slight infusion of Moorish details in parts, till in the 15th it broke away from its prototype into a style half German, half Spanish, with all the masonic cleverness so fatal to the style in Southern Germany, and more than German exuberance of detail, and complexity of vaulting expedients. With these the style continued to be used for churches as late as in England, and long after the classical styles had become universal in Italy and fashionable in France.

The Gothic style was not entirely disused in Spain till after the middle of the 16th century, but there its history ends, no attempt at a Gothic revival having yet been perpetrated among that inartistic race. It may come, however; but they would adopt Mexican or Chinese with equal readiness, if either of these styles would provide them with places of worship as gorgeous and as suited to their purposes as those they now possess.[1]

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[1] So much of the information regarding Spanish architecture which is contained in the following pages, is derived from Mr. Street's beautiful work, entitled 'Gothic Architecture in Spain,' published in 1865, that it has not been thought necessary to refer specially to that work in the text. With one or two exceptions, all the plans are reduced from those in Mr. Street's book, and many of the woodcuts are also his. If any one will take the trouble of comparing the very meagre account of Spanish architecture contained in the 'Handbook,' with what is said in this work, they will at once perceive my obligations to Mr. Street. His work is a model of its class, and has quite revolutionised our knowledge of the subject.

CHAPTER II.

CONTENTS.

Round-arched Gothic: Churches at Naranco, Roda, and Leon—Early Spanish Gothic: Churches at Santiago, Zamora, Toro, Avila, Salamanca, and Tarragona — Middle Pointed style: Churches at Toledo, Burgos, Leon, Barcelona, Manresa, Gerona, Seville — Late Gothic style: Churches at Segovia, Villena — Moresco style: Churches at Toledo, Illescas, and Saragoza.

EARLY SPANISH ROUND-ARCHED GOTHIC.

As might be expected from what we know of the history of Spain, the only specimens of this style which are known to exist in the country are to be found in the Asturias or in the recesses of that mountain range which extends from Corunna to Barcelona. It was in these regions alone that the Spanish Christians found refuge during the supremacy of the Moslems in the Peninsula, and were free to exercise their religious forms without molestation.

Four or five examples of the style have been described in sufficient detail to enable us to see what its leading features were. The earliest appears to be that of Santa Maria de Naranco, near Oviedo, said to be erected A.D. 848.[1] Another is San Miguel de Lino, which appears to be nearly as old. A third, San Salvador de Val de Dios,[2] is less important than the other two, and, though peculiar, more like an Irish or French oratory than the others. A fourth is Santa Cristina de Lino.[3] San Pablo, Barcelona,[4] may be of about the same age as these; and no doubt there are many others which have escaped notice from their insignificant dimensions.

Among these the most interesting is that first named, which stands at Naranco. As will be seen from the plan (Woodcut No. 687), it is unlike any contemporary example we are acquainted with. Practically it is a Roman tetrastyle amphiprostyle temple, if such terms can be applied to a Christian edifice; and, so far as we can understand, the altar was placed originally in one of the porticoes, and the worship was consequently probably external. The great difference seems to have been that there was a lateral entrance, and some of the communicants at least must have been accommodated in the interior. The ornamentation of the interior differs from classical models more than the plan. The columns are spirally fluted—a classical form—but the capitals are angular, and made to support arches. On the walls also there are curious medallions from which the vaulting-ribs spring, which seem peculiar to the style, since they are found repeated in S. Cristina.

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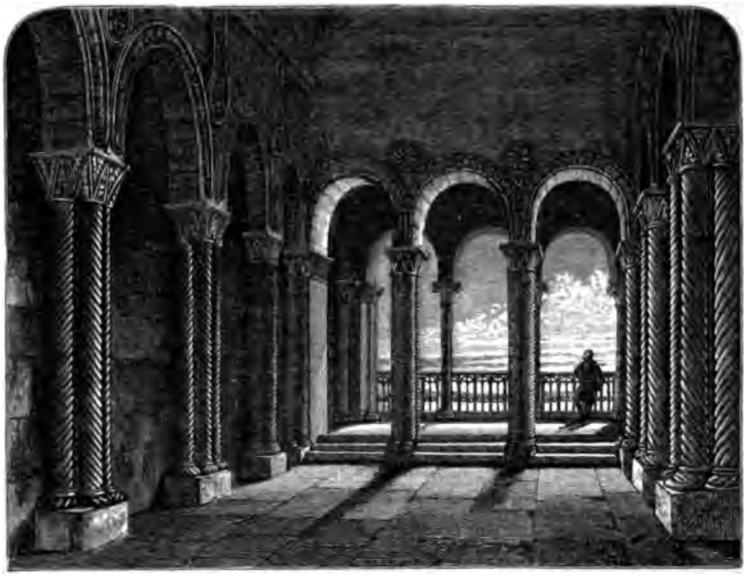
[1] Parcerisa, 'Recuerdos y Bellezas de España.'—Asturias, p. 78.

[2] 'Monumentos Architectonicos.'

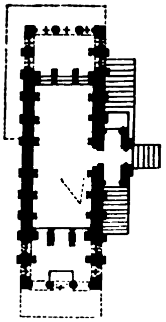
[3] Ibid.

[4] Ibid.



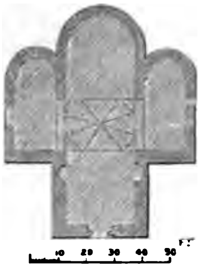
686. View of Church at Naranco. (From Parcerisa.)

The chief interest of this building, however, lies in the fact that it exhibits the Spaniards in the middle of the 9th century trying to adapt a Pagan temple to Christian purposes, as if the Romans had left no basilicas in the land, and as if the Goths had been unable to elaborate any kind of "ecclesia" in which they might assemble for worship. San Miguel and Santa Cristina are adapted for internal worship, but their form is very unlike those of any other church we are acquainted with. The church of San Pablo differs essentially from them, inasmuch as it is a complete Christian church in all its essentials. Though very small (80 ft. by 67), it is triapsal, with a central dome and all the arrangements of a church, but more like examples found in the East than anything usually known in the West. Its details still retain traces of classic feeling (Woodcut No. 689), though something not unlike the Jewish candlestick of the Temple is mixed up with ornaments of Christian origin.

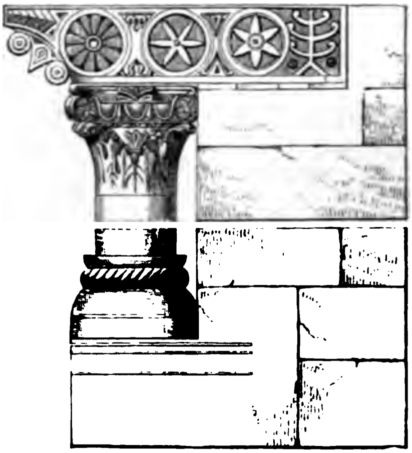


687. Plan of Church at Naranco. Scale 50 ft. to 1 in.

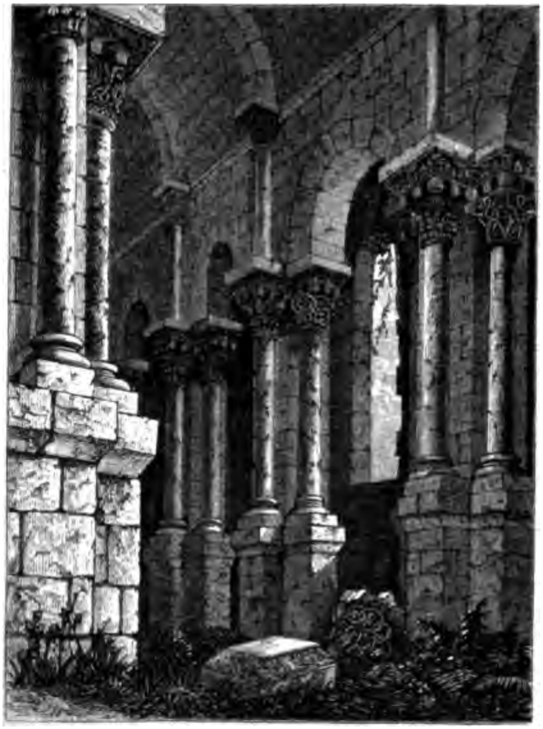
It is difficult to distinguish between the buildings existing in Catalonia and on the southern side of the Pyrenees, and those which prevailed in the southern Aquitanian province. The church at Roda, for instance (Woodcut No. 690), might as well have been found at Alet (Woodcuts Nos. 315, 316) or Elne (Woodcuts Nos. 326, 327). It presents a complete Gothic style, rich and elegant in its details, but the parts badly fused together, and not well proportioned



683. Plan of S. Pablo. (From 'Mon. Arch.')



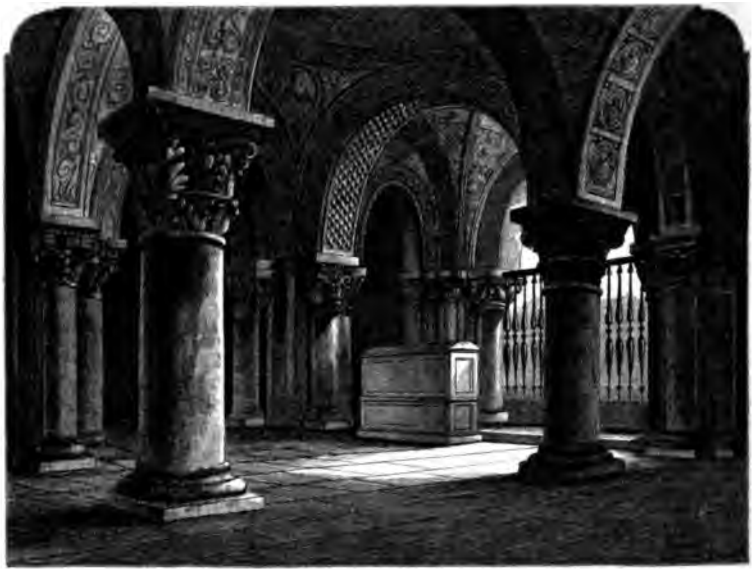
689. Detail of S. Pablo. (From 'Mon. Arch.')



690. Church at Roda. (From Parcerisa.)

either to each other or to the work they have to do. Still the combinations are so picturesque, and the details so elegant, that it is not without regret that we find the style of Alet and Roda passing away into something more mechanically perfect, but without their quasi-classical refinement.

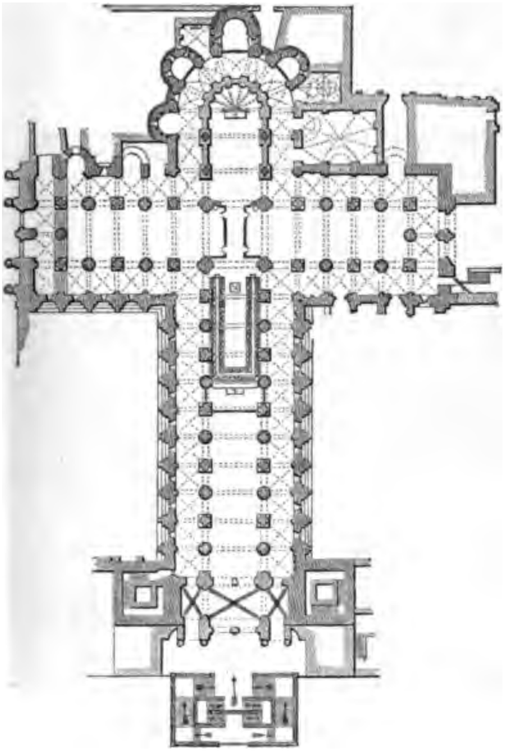
Towards the other extremity of the architectural province we find in the Panteon of the church of San Isidoro at Leon (A.D. 1063) a contemporary example, exhibiting a marked difference of style. At the time when this and the church at Roda were erected, Catalonia belonged architecturally to Aquitaine, and Leon to Anjou, or some more completely Gothicised province of France. In consequence, we find the style at Leon much more complete in principle, but very much ruder in detail. The eastern province was in the hands of a Latin people; the inhabitants of the western must have been far more essentially Gothic in blood, and their style is strongly marked with the impress of their race.



691. Panteon of St. Isidoro, Leon. (From Parcerisa.)

Early Spanish Gothic.

After three centuries of more or less complete supremacy over the whole of Spain with the exception of the northern mountain fastnesses, the tide of fortune at length turned against the Moors. During the course of the 11th century the Castilles and all to the north of them were freed for ever from their power. Their favourite capital, Toledo, fell into the hands of the Christians in 1085, and from that time the Christians had nothing to fear from the Moors, but on the contrary had the prospect of recovering the whole of their country from their grasp. It was consequently a period of great and legitimate exultation, greater than that which followed the fall of the last stronghold of the Infidels before the conquering arms of Ferdinand and Isabella (A.D. 1492)—an event that ended the drama of the Middle Ages in Spain, which the conquest of Toledo had commenced. It is between these two events that the history of Gothic art in Spain is practically included.



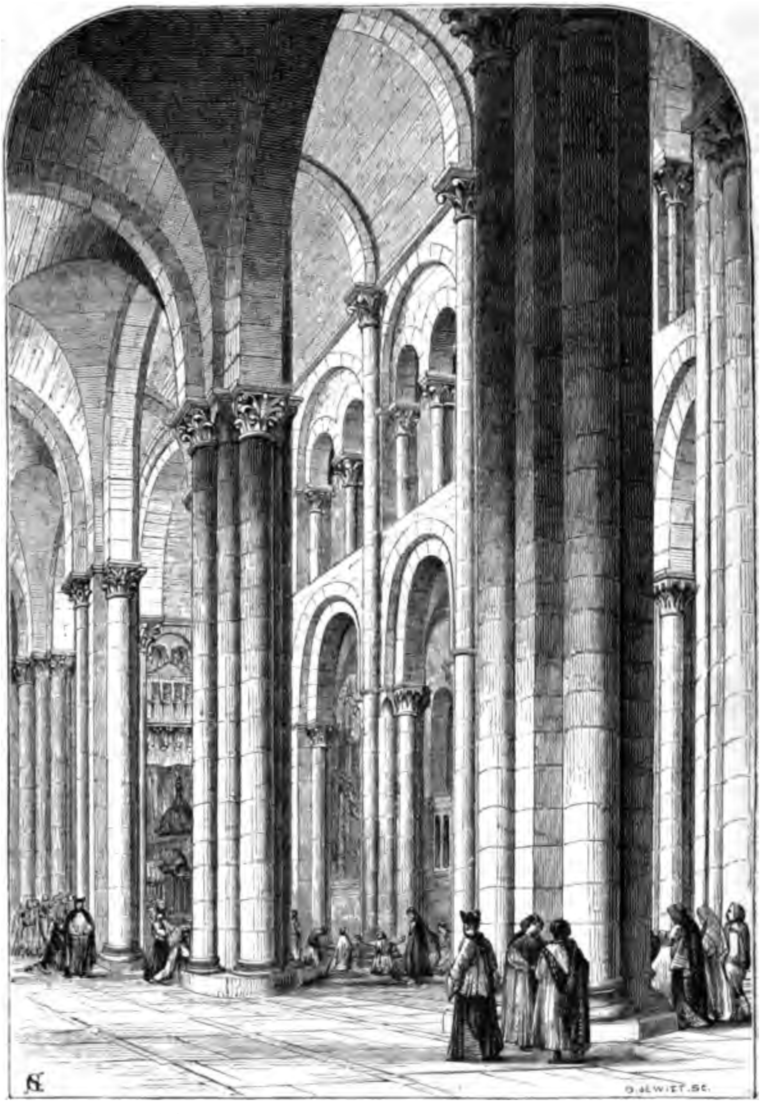
692. Plan of Santiago di Compostella. (Reduced from Street.) Scale 100 ft. to 1 in.

For present purposes it may suffice to divide this history into three great chapters.

1. Early Spanish Gothic, commencing about 1060, and lasting for two centuries. A plain and simple, but bold and effective style, first borrowed from the French, but latterly assuming a local character. Round-arched when first introduced, but adopting the pointed form in its later development, though still retaining the rounded form in many of its details till a very late period of the style.

2. Middle or perfect Pointed Gothic, introduced from France about the year 1220, when Amiens and Salisbury were founded; and used in the plans of Toledo, Burgos, and Leon. It consequently overlaps the other to some extent, though its actual development as we now see it (except in plans) must probably date from the latter part of the 13th century. It may be said to have lasted for more than 200 years, though it is extremely difficult to draw a line between it and the

3rd period, or Late Gothic style, the duration of which was probably hardly more than one century. The cathedral at Salamanca was founded 1513, and that at Segovia 1525; and these are the two typical examples of the style, which in minor examples continued to be practised till nearly the end of the 16th century, but latterly with a considerable admixture of Renaissance details.

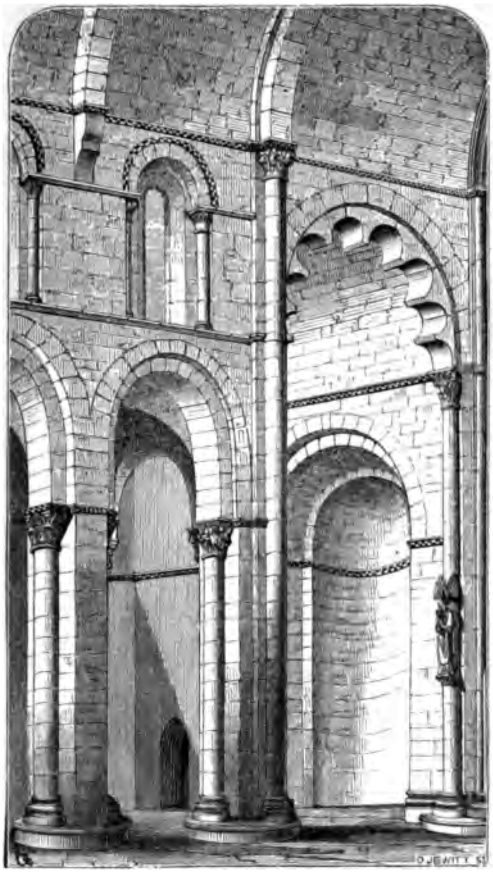


693. Santiago Cathedral. Interior of South Transept, looking North-East. (From Street.)

One of the earliest examples of a complete cathedral in Spain is that of Compostella, commenced in 1078, and carried on vigorously from the foundation. As will be seen by the plan, it is a complete

French cathedral in every respect, very nearly identical with that of St. Sernin at Toulouse (Woodcut No. 338), possessing only three aisles instead of five in the nave, though otherwise very similar to it in arrangement and general dimensions.

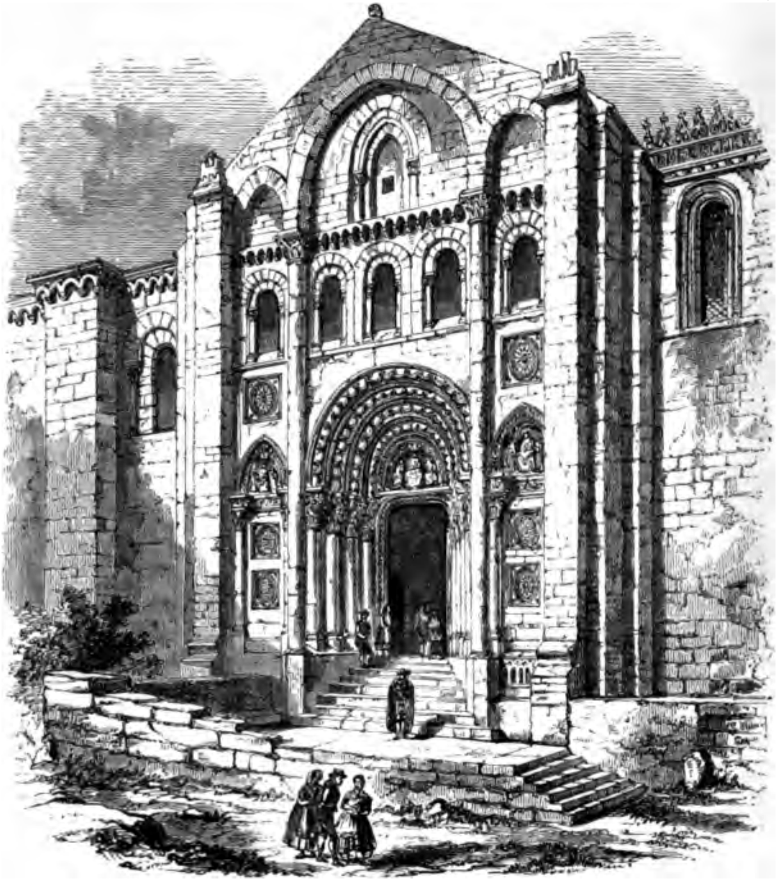
Its internal structure is also that of the French cathedral, and forms an instructive point of comparison with our English examples of the same age. Up to the string-course above the triforium the Spanish, French, and English examples are much alike, except that the section of the piers in England is nearly double that of the others. Above this, at Toulouse and Compostella, there is a bold tunnel-vault with transverse ribs; at Ely, Norwich and Peterborough a clerestory with a flat wooden roof. These differences in the treatment of the upper part no doubt arose to some extent from the difference of latitude, sufficient light being attainable in the South without a clerestory, though the gloom of such a design could never be tolerated in Normandy, and much less in England.



694. Interior of S. Isidoro, Leon. (From Street.)

What is most striking, however, at Compostella is the completeness of the style. The piers are not only judiciously proportioned to the work they have to perform, but are as perfect in their details as any of the contemporary churches in Auvergne; and, though in what may be called a Doric style, this church is as complete in itself as any of the florid Corinthian Gothics that succeeded it.

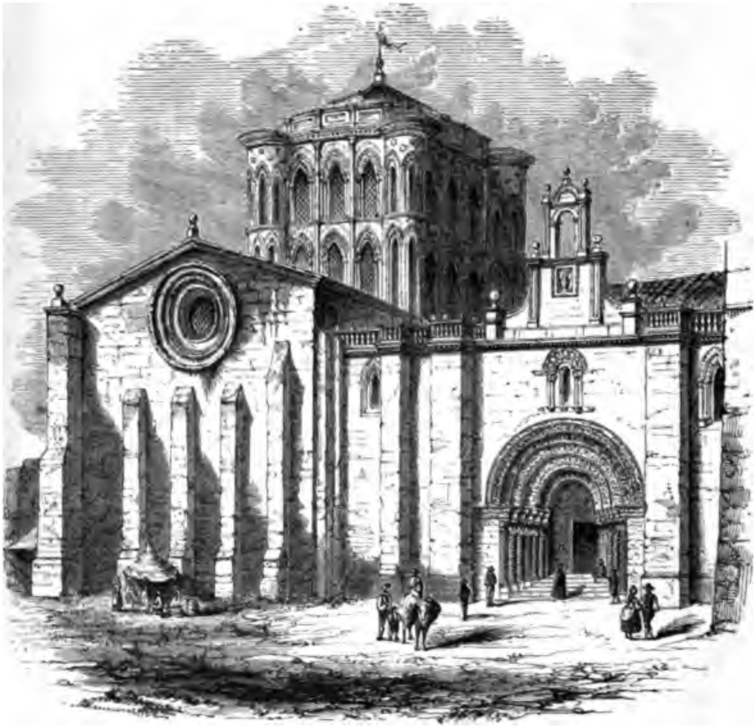
The same may be said of the church of San Isidoro at Leon, which, though probably somewhat later—the church seems to have been completed about 1149—presents the same simple style in the same degree of well-understood completeness, all the lines running through without confusion, and every part well proportioned to the other. The foliation of the transept arch may be a peculiarity borrowed from the Moors, but, as used here, it is simple and appropriate, and perhaps better than a roll moulding, which would have been the mode of treatment on this side the Pyrenees.



6[illegible]5. Cathedral at Zamora. (From Villa Amil.)

The interior of Zamora Cathedral, which seems to have been erected about the year 1174, though wholly in the pointed-arch style, is as plain and as little ornamented as that last described. Even the interior of the dome is plain when compared with its exterior, which is varied in outline and rich in decoration like most of those of that age in Spain. As in the façade, the round arch is employed in the cimborio almost to the exclusion of the pointed arch as a decorative feature, though in the lower part of the façade and under the dome all the arches are pointed.

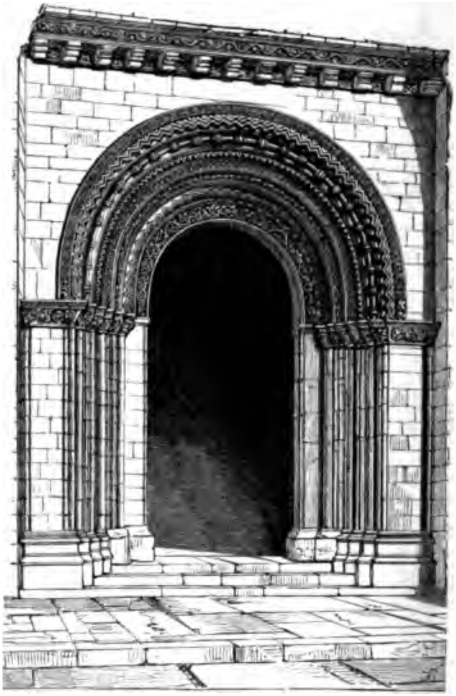
It is possible that these interiors, which now look so plain, were, or were intended to be, plastered and painted; though, had the intention been carried out, it is hardly probable but that traces of this mode of decoration would have remained to this day, which does not seem to be the case. Still it is difficult to understand why they should have designed a façade so rich as that of Zamora Cathedral (Woodcut No. 695), if it were to lead to an interior infinitely plainer than the exterior would lead one to expect. In all the countries of Europe during the Round-arched Gothic period the external doorways were the features on which the architects lavished all their art, and Spain was certainly not behind the others in this respect. That at Zamora is excelled in richness by that at Toro (Woodcut No. 696), though the rest of the façade is not so well worked up to its key-note as in the last example. Among a hundred, one of those at Lérida (Woodcut No. 697), borrowed from Mr. Street's work, will illustrate their beauty, and seems to force on us the conviction that so much labour



696. Collegiate Church at Toro. (From Villa Amil.)

would not have been bestowed on them if they were not intended to herald a greater richness within.

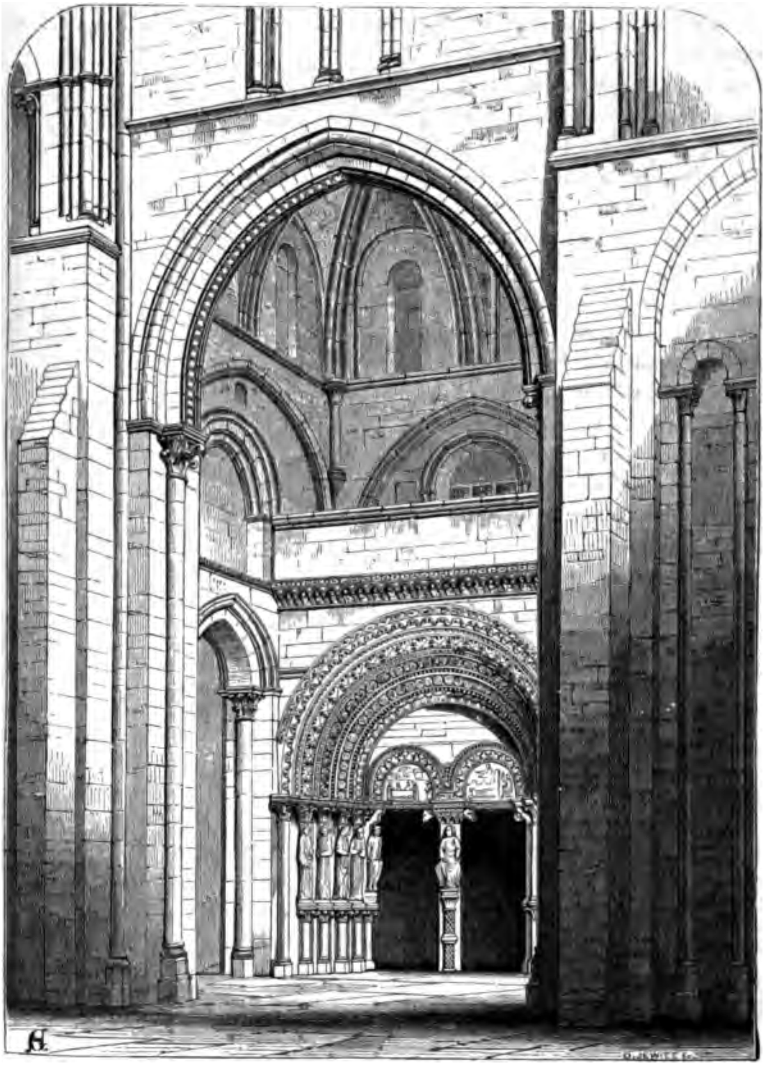
In this last example, the doorway has been covered by a porch of 14th or 15th century work; but occasionally the Spaniards seem to have attempted a porch on the scale of Peterborough, as in the church of San Vincente at Avila (Woodcut No. 698). In this instance we have only one arch between two flanking towers; but, though limited in extent, it forms a very noble feature, and gives a dignity to the entrance, too often wanting in Gothic design. Its date is uncertain — probably the end of the 12th century—but, strange as it may appear, the richly carved doorway within, though round-arched, seems to be an insertion either of the same age, or subsequent to the pointed-arch architecture which surrounds it.



697. Lérida Old Cathedral. Door of South Porch. (From Street.)

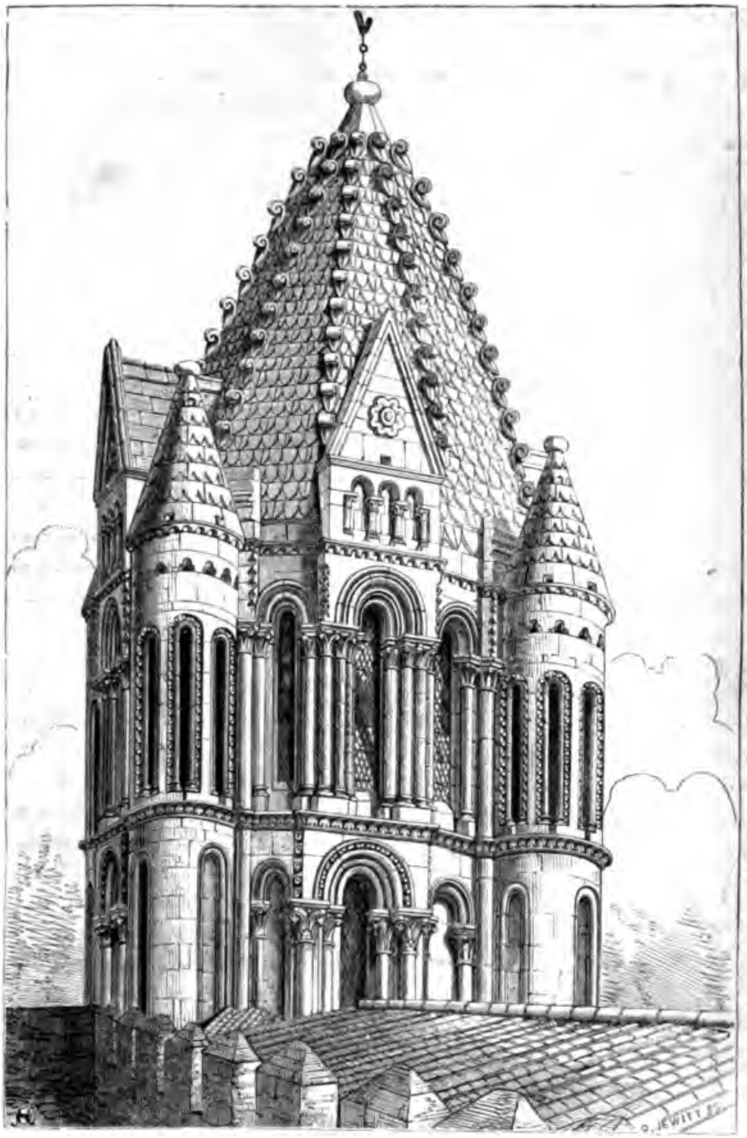
Beautiful as are these details, the great feature of the Early Spanish style is the cimborio, or dome, which generally occurs at the intersection of the nave with the transepts. Something very similar is to be found in France, especially in Auvergne and Anjou; but the Spaniards seized upon it with avidity, and worked it out more completely than any other nation; and with their wide naves it afterwards assumed an importance almost equal to the octagon at Ely. One of the most perfect examples in the early style, is that which crowns the old cathedral at Salamanca (Woodcut No. 699), and dates about 1200. As will be observed from the view of the exterior, every detail belongs to the round-arched style, and in France would certainly be quoted as belonging to that date, or earlier; but when we turn to the interior (Woodcut No. 700), we find that the whole substructure is of pointed architecture. True it is the old simple Early Spanish style, yet still such as rather to upset our ideas of architectural chronology in this respect. The internal diameter of the dome is only 28 feet; yet it is a most effective feature both internally and externally, and gives great dignity to what otherwise would be a very plain building.

Without going beyond the limits of the style, the dome at Tarragona (Woodcut No. 703) illustrates the form usually taken by Gothic domes when resting on square bases. There is a little awkwardness in the form of the pendentives, which do not fit the main arches below them, though at that age the Spaniards might have learned from the Saracens how to manage this feature. At



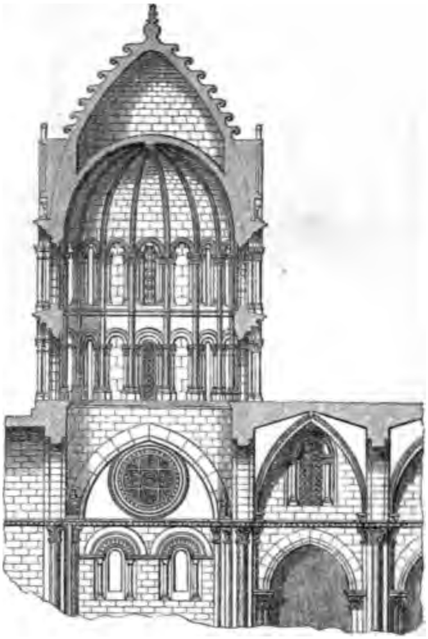
698. San Vincente, Avila. Interior of Western Porch. (From Street.)

Salamanca the mode in which the square base was worked up into a circle was by pendentives of Byzantine form, the courses of masonry simply projecting beyond one another till the transition was effected, but without that accentuation which was thought so essential in Gothic art. Above the pendentives, however, at Tarragona, the form



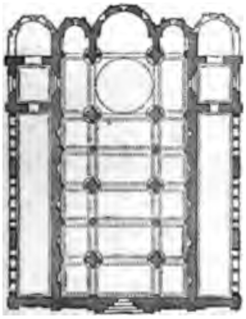
699. Exterior of Lantern, Salamanca Old Cathedral. (From Street.)

of the dome is perfect. The windows are alternately of three and four lights, and the whole is fitted together with exquisite propriety and taste.

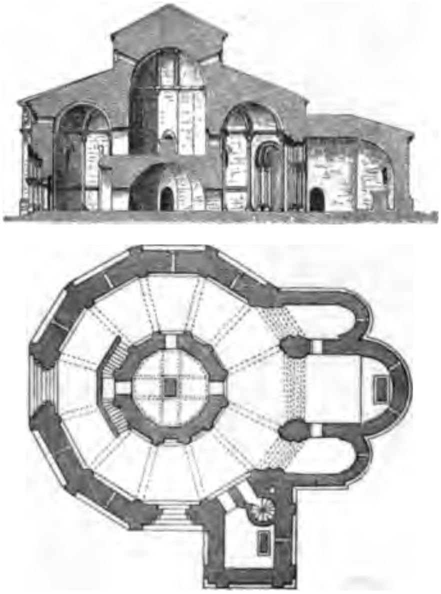


700. Section of Cimborio at Salamanca. (From 'Mon. Arch. d'Espana.') No scale.

Although borrowing their style in the first instance immediately from the French, the Spaniards developed it with such a variety of plans and details, as might have made it a style of their own but for the fresh importation of French designs in the beginning of the 13th century. Before these came in, however, they had very frequently in their churches adopted a form of external portico which was singularly suited to the climate and produced very original and pleasing effects. In the annexed plan of St. Millan at Segovia (Woodcut No. 701), they form fourth and fifth aisles opening externally instead of internally; these, with the windows over them and the shadow they afford, break up the monotony of the sides of the church most

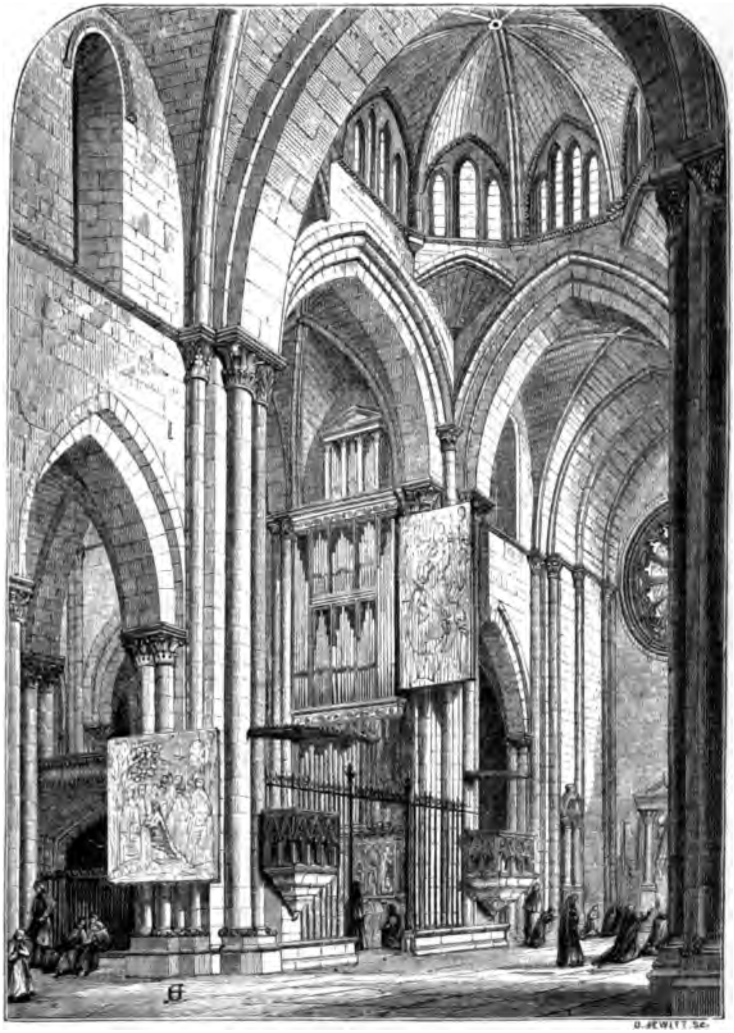


701. St. Millan, Segovia. (From Gailhabaud.)
Scale 100 ft. to 1 in.



702. Church of the Templars at Segovia. No scale.

pleasingly.[1] Sometimes the aisles are carried round the church, so as to form a portico at the west end as well as at the sides. Sometimes they are on one side or the other as the situation demands; but wherever used they are always pleasing and appropriate.



703. Tarragona Cathedral. View across Transepts. (From Street.)

The round form of church does not seem ever to have been a favourite in Spain. There are some examples, it is true, but they seem, like that at Segovia (Woodcut No. 702), to have been built by the Templars in imitation of the church at Jerusalem, and used by them, and them only. The idea of a circular ceremonial church attached to a rectangular "ecclesia," does not appear to have entered into Spanish arrangements. As before remarked, the sepulchres of the original people of Spain do not seem to have been sufficiently important to lead to any considerable development of this form in the Christian times.

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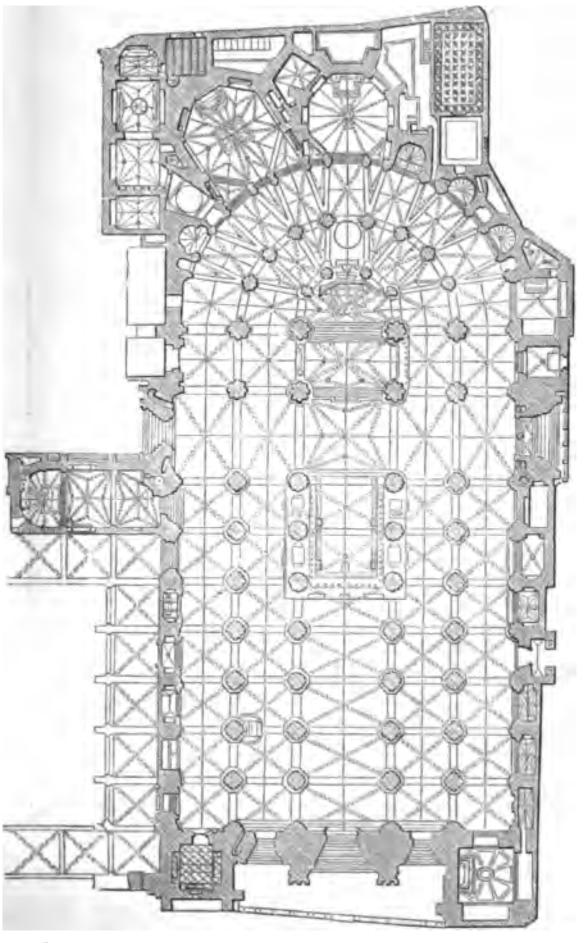
[1] These external porticoes would be admirably adapted for imitation in the climate of India.

Middle Pointed Spanish Style.

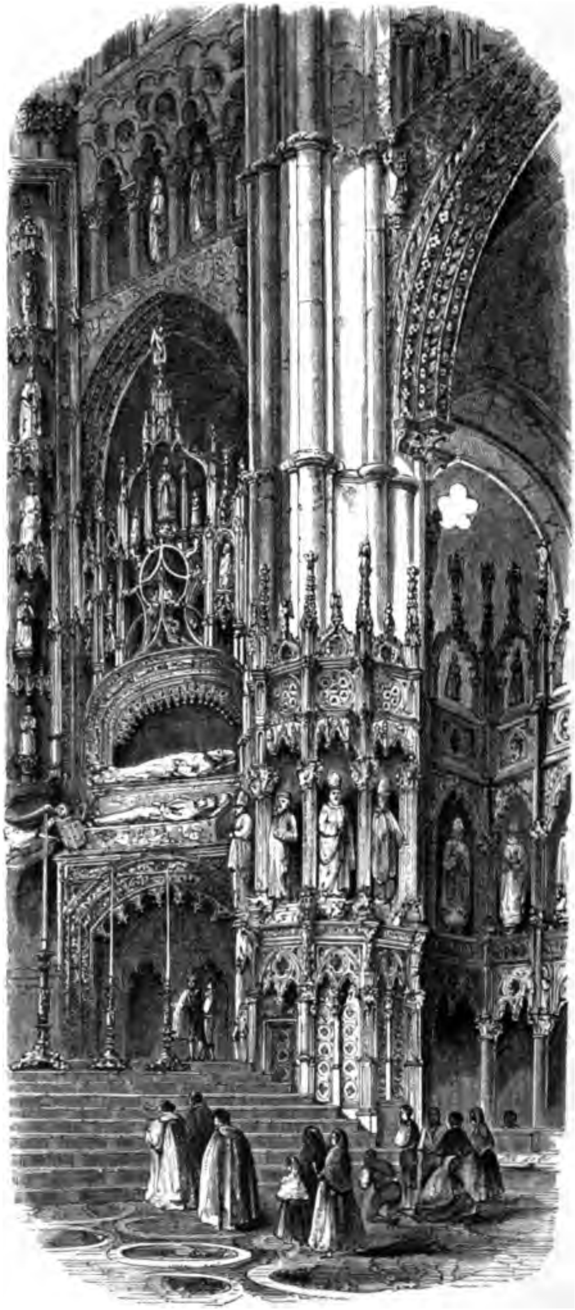
While the early style described in the last chapter was gradually working itself into something original and national, its course was turned aside by a fresh importation of French designs in the beginning of the 13th century. Before the Germans had made up their minds by building the Cathedral of Cologne to surpass the grandest designs of the French architects, the Spaniards had already planned a cathedral on a scale larger than any attempted even in France. The great church at Toledo was commenced in 1227, seven years after Amiens and Salisbury cathedrals had been determined upon. The plan is certainly of that



704. Plan of Cathedral at Toledo. (From 'Monumentos Architectoricos d'Espana.') Scale 100 ft. to 1 in.

date; the present superstructure may rather be taken as representing the style of the end of the 13th century, though it does not seem to be known when the church was first consecrated.

The church which Toledo Cathedral most resembles in plan is that at Bourges (Woodcut No. 406). The length is about the same, but the French example is only 130 ft. in width across the five aisles, while the Spanish church is 178 ft., so that its area is considerably in excess. It is not easy to say what the area of Toledo Cathedral really was, as we cannot quite determine which of the excrescences belong to the original design; but we shall not probably be far wrong in estimating it as under 75,000 ft. It is less therefore than Seville,



705. View in the Choir of the Cathedral at Toledo. (From Villa Amil.)

Milan, or Cologne. It covers rather more ground than York Cathedral, but considerably exceeds Chartres (68,000 ft.), or any of the French cathedrals.

The church at Toledo possesses the same defect in plan that we remarked on in describing that at Cologne: it is too short for its other dimensions. When the French architect at Bourges found himself in that difficulty he omitted the transepts, and so, to a great extent, restored the appearance of length. The architect at Toledo has not projected his transepts to the same extent as at Cologne, but they are still sufficiently prominent internally to make the church look short; but, on the other hand, by keeping his vault low, he has done much to restore the harmony of his design; and instead of the 150 ft. of Cologne, or the 125 of Bourges, even with his greater lateral extension, the height of the central vault is little over 100 ft. (105 ?). The next aisle is 60, the outer 35,—a proportion certainly more pleasing than Bourges, or any other five-aisled cathedral. So thoroughly French is the design, that there is no attempt at a cimborio or dome of any sort at the intersection of the nave and transepts; but, on the other hand, the arrangement of the choir is essentially Spanish, and the screen surrounding it among the most gorgeous in Spain, and one of the most beautiful parts of the cathedral.

The origin of the Spanish arrangement of the choir will be understood by referring to the plan of San Clemente at Rome (Woodcut No. 273). The higher clergy were in the early days of the Church accommodated on the bema in the presbytery. The singers, readers, &c., were in an enclosed choir in the nave. The place for the laity was around the choir outside. So long as the enclosing wall of the choir was kept as low as it was at Rome (about 3 ft.), this arrangement was unobjectionable: but when it came to be used as in Spain, it was singularly destructive of internal effect. In France the stalls of the clergy were in the choir beyond the transept, and all to the eastward of the intersection was reserved for them, the nave being wholly appropriated to the laity. This was an intelligible and artistic arrangement of the space; but in Spain the stalls of the clergy were projected into the nave, blocking up the perspective in every direction and destroying its usefulness as a congregational space, where the laity could assemble or be addressed by the bishop or clergy. Worse than this, it separated the clergy from the high altar and Capilla Maior, in which it was situated, so that a railed gangway had to be kept open to allow them to pass to and fro.[1] When the Spaniards determined that this was the proper liturgical arrangement for a church, had they been an artistic people they would have invented an appropriate shell to contain it; but to put such an arrangement into a French church was a mistake that nothing could redeem. Even the elaborate richness of the exterior of the choir at Toledo fails to reconcile us to it, though it is perhaps the richest specimen of its class in Europe, and betraying in certain parts of its ornamentation the influence of Moorish taste which still lingered in the soil in spite of persecution and every attempt to eradicate it.

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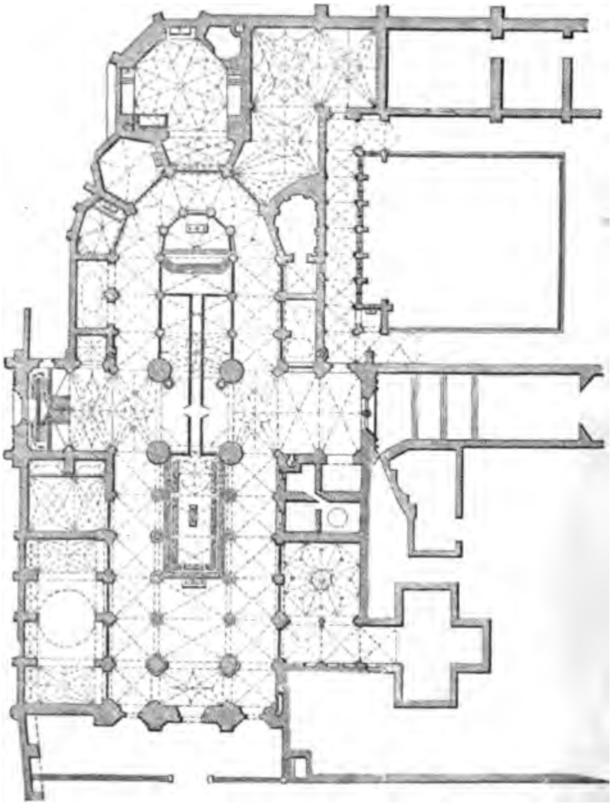
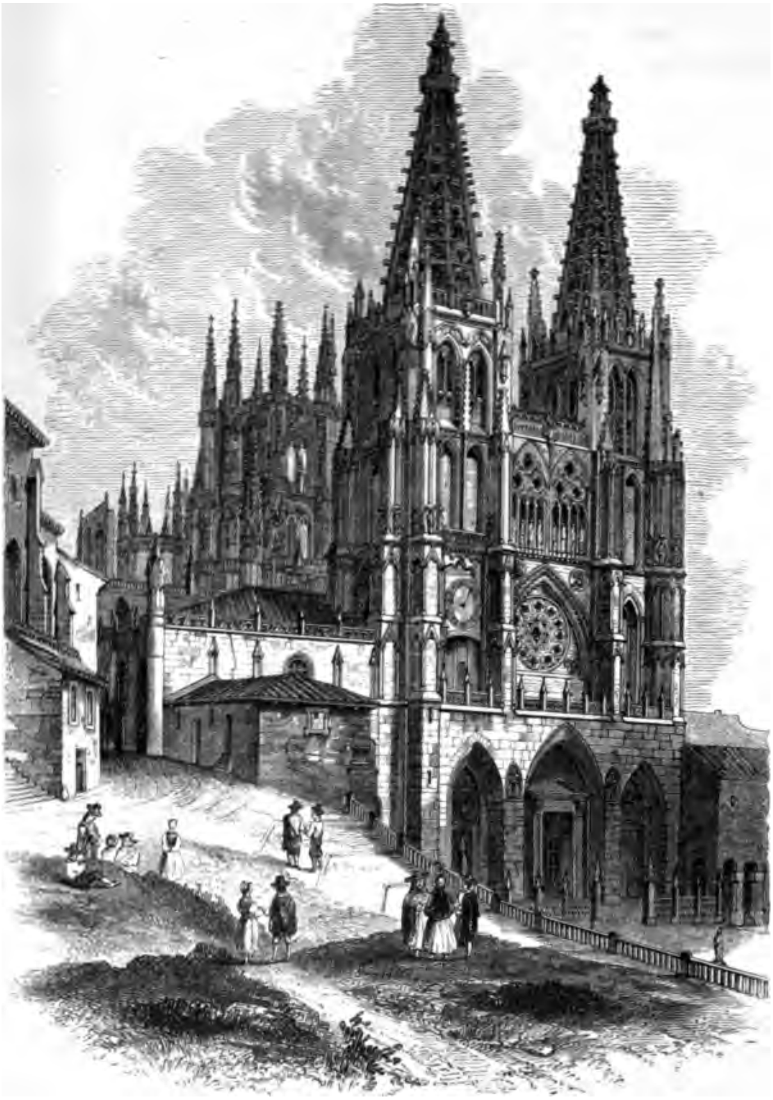
[1] The Spanish arrangement has recently been adopted in Westminster Abbey, more by accident than design; with an effect as disastrous as anything in Spain, and apparently as little felt.



706. Plan of Burgos Cathedral. (Reduced from Street's.) Scale 100 ft. to 1 in.

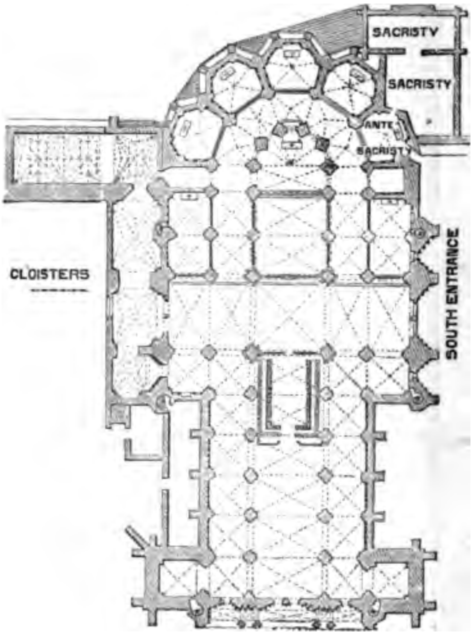
The external appearance of this church is very much less beautiful than that of the interior. It is, however, so encumbered, that a good view of it can hardly be obtained, and what is seen has been so much altered as to have lost its original character. The north-western tower of the façade is fine, though late (1428–1479) and hardly worthy of so grand a building. Its companion was terminated with an Italian dome in the last century, and both in height and design is quite incongruous with the rest.

If at Toledo we find a noble interior encased in an indifferent husk, the contrary is the case at Burgos. Although very much smaller, being only originally designed to be 90 ft. wide by about 310 ft. long, and all its dimensions reduced in proportion, still externally it is as picturesque and effective a design as can be found anywhere in Europe.



707. West Front of Burgos Cathedral. (From Chapuy, 'Moyen-Age Monumental.')

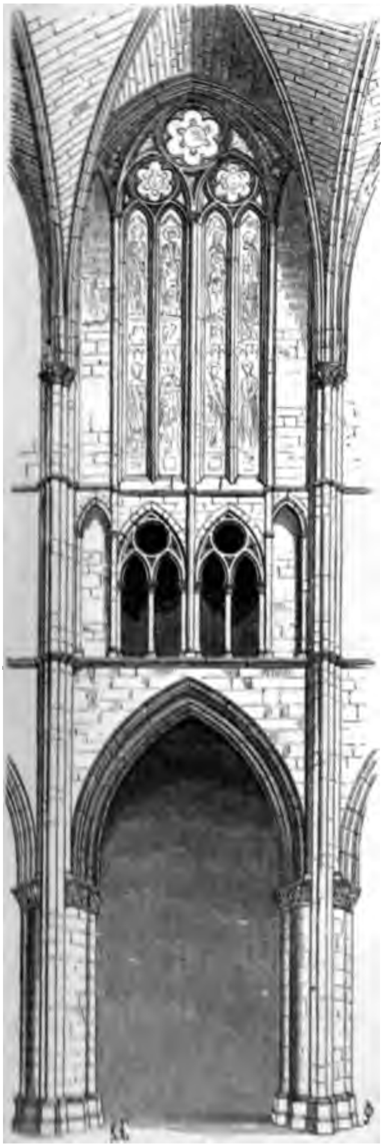
The western façade (1442) is essentially a German design, originally consisting of three portals deeply recessed and richly sculptured, and still crowned with two spires of open work, and is exquisitely proportioned to the size of the building, though its details are open to criticism. It is well supported by the cimborio or dome at the intersection, though this is even later, having been erected to replace the old dome which fell in 1539, and seems not to have been completed till 1567. Beyond this again, to the extreme east, rises the chapel of the Connestabile, erected about 1487, and though this also is impure in detail it is beautiful in outline, and groups pleasingly with the other features of the design. The effect of the interior is very much injured by the four great masses of masonry which were introduced as piers to support the cimborio when it was rebuilt; and which, with the "Coro" thrust as usual into the nave, greatly destroy the appearance of the building. On the other hand, the richness of the details of the Capilla Maior and of the Connestabile chapel, together with the variety and elaborateness of the other chapels, make up an interior so poetic and so picturesque, that the critic is disarmed, and must admit that Burgos merits the title of a romance in stone if any church does.



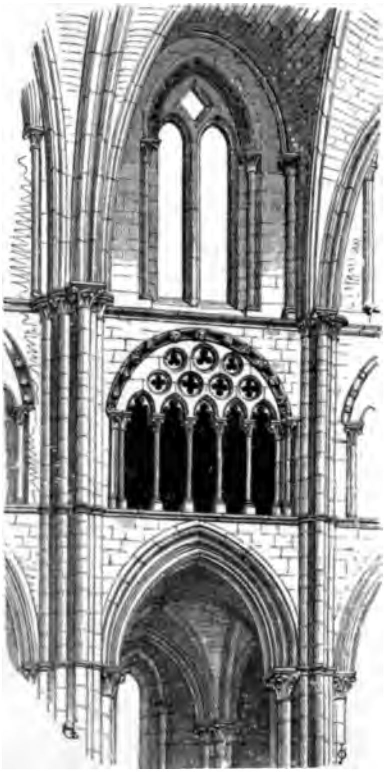
708. Plan of Leon Cathedral. (Reduced from Street's.) Scale 100 ft. to 1 in.

Leon is a third 13th-century church, the design of which seems certainly to have been imported from France. The exact date of its commencement is not known. Mr. Street thinks it about 1250–58, which seems very probable, and it may have been practically completed about 1305. Its dimensions are not unlike those of Burgos; but it has been very much less altered, and may be taken as the type of a 3-aisled basilica as imported into Spain in the 13th century. In the arrangement of the pier-arches (Woodcut No. 709) it very much resembles Beauvais, and in the extent of the clerestory it is more essentially French than almost any other church in Spain. Burgos, on the contrary (Woodcut No. 710) possesses features not to be found in France, such as the round-arched head to the triforium, and the rounded form of the clerestory intersecting vault. The tracery of the clerestory windows is also peculiar in such a situation, and altogether there is a Southern feeling about the whole design which we miss at Leon.

Oviedo is another example of the same class, and generally it may be said that the Spanish cathedrals which were commenced in the first half of the 13th century are all more or less distinctly French in design. But the Spaniards were again working themselves free from their masters, and towards the end of the century and during the next erected a class of churches with wide naves and widely spaced piers which were very unlike anything to be found [illegible] France; and, if they cannot be considered as original, their affinities [illegible]st be looked for rather in Italy than to the north of the Pyrenees.

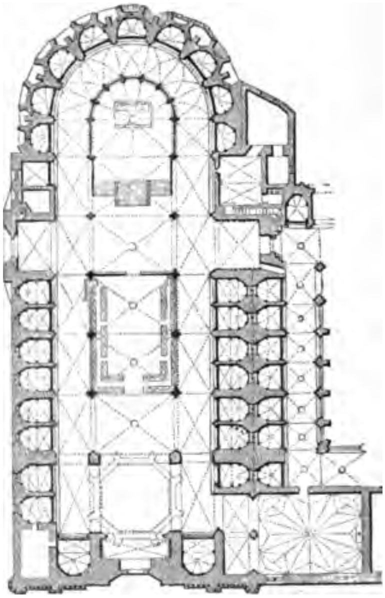


709. Bay of Choir, Leon Cathedral. (From Street.)



710. Compartment of Nave, Burgos Cathedral.

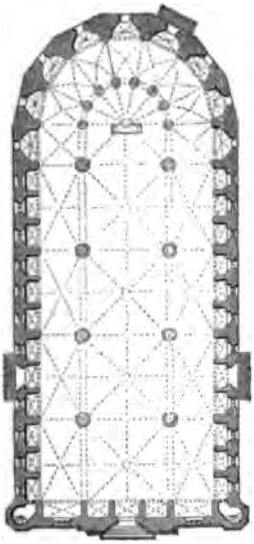
Among these churches the most remarkable group is that still existing in Barcelona. That city seems during the 14th century to have had a season of great prosperity, when the cathedral and other churches were rebuilt on a scale of great magnificence, and with especial reference to the convenience of the laity as contradistinguished from the liturgical wants of the clergy. The cathedral seems to have been commenced about 1298 and been tolerably far advanced in 1329. Its internal length is about 300 ft., its width, exclusive of the side chapels, about 85 ft., so that it is not a large church, but is remarkable for the lightness and wide spacing of its piers, and generally for the elegance of its details. Looked at from a purely æsthetic point of view, it has neither the grandeur nor solemnity of the older and more solid style; but gloom and grandeur are not necessary accompaniments of a city church, and where cheerfulness combined with elegance are considered appropriate, few examples more fully meet these conditions than this church. Considerable effect is obtained by the buttresses of the nave being originally designed, as was so frequently the case in the South of France, as internal features, and the windows being small are not seen in the general perspective. This supplies the requisite appearance of strength, in which the central piers are rather deficient, while the repetition of the side chapels, two in each bay, gives that perspective which the wide spacing of the central supports fails to supply. Altogether the design seems very carefully studied, and the result is more satisfactory than in most Spanish churches.



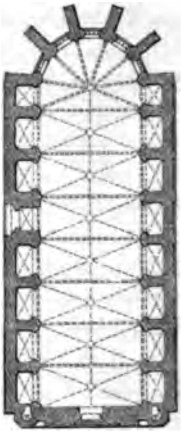
711. Plan of Cathedral at Barcelona. (Reduced from Street's.) Scale 100 ft. to 1 in.

The system which was introduced in this cathedral was carried a step further in Sta. Maria del Mar (1328–1383). There the central vault was made square and quadripartite, as was frequently the case in Italy; the vault of the aisles oblong, on exactly the contrary principle to that adopted in the North of Europe. Again, however, the equilibrium is to some extent restored by each bay containing three side chapels, though the effect would have been better if these had been deeper and more important. Such a design is inappropriate when a choir is necessarily introduced to separate the clergy from the laity, but for a congregational church it is superior to most other designs of the Middle Ages.

A third church, Sta. Maria del Pi (1329–1353), carries this principle one step farther—this time, however, evidently borrowed from such churches as those of Alby (Woodcut No. 334) or Toulouse (Woodcut No. 335). It has been carried out with the utmost simplicity. The clear internal length is nearly 200 ft., the clear width upwards of 50 ft. Such a church would easily contain 2000 worshippers seated where all could see and hear all that was going on. Though it may be deficient in some of those poetic elements which charm so much in our Northern churches, there is a simple grandeur in the design which compensates for the loss.



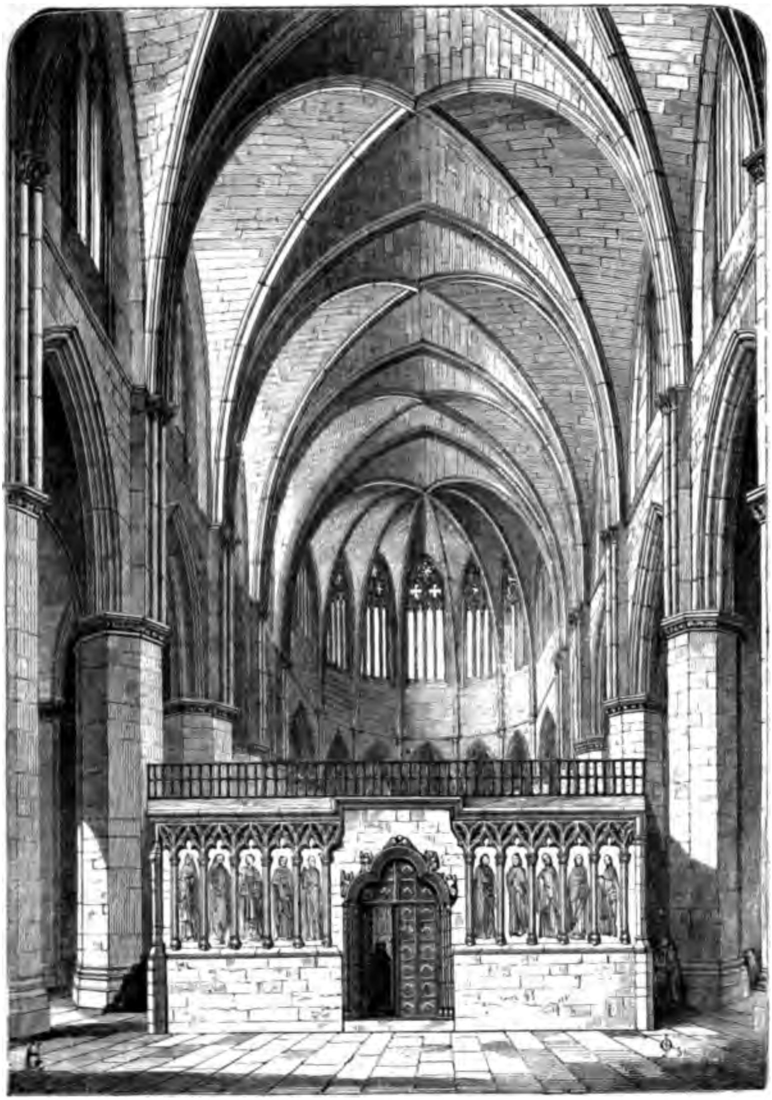
712. Sta. Maria del Mar, Barcelona. (From Street.) Scale 100 ft. to 1 in.



713. Sta. Maria del Pi, Barcelona. (From Street.) Scale 100 ft. to 1 in.

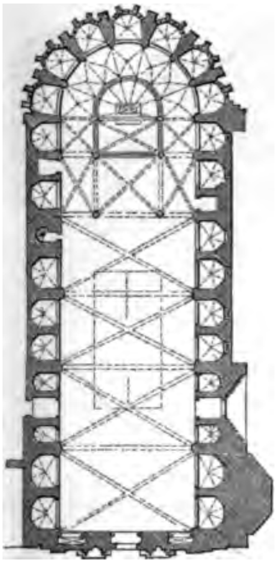
The Church (Woodcut No. 714) at Manresa is very similar in design to Sta. Maria del Mar, only carried a step farther, and in the wrong direction. From wall to wall it is 100 ft. wide, and 200 ft. long, and is thus so comparatively short that we miss the perspective which is the great charm in Northern cathedrals. Still if it were not that the central aisle is blocked up by the choir, as is usual in Spain, it would be a very noble church. Its central aisle, which possesses a clear width of 56 ft., would be a very noble place of assembly for a congregation. There is, at the same time, a simplicity and propriety about its details and the arrangement of its apse which have seldom been surpassed, while, at the same time, they are characteristic of Spain.

The Spaniards having once grasped the idea of these spacious vaulted halls, and found out the means of constructing them, they carried the principle far beyond anything on this side of the Pyrenees. Their most successful effort in this direction was at Gerona. The choir of a church of the usual French pattern had been erected there in the beginning of the 14th century (1312 ?), but it had remained unfinished till 1416, when after much consultation it was determined to carry out the design of a certain Guillermo Boffiy, who proposed to add a nave without pillars, of the same breadth as the centre and side aisles of the choir. As will be seen from the plan, it consists of a hall practically of two squares, the clear width being 73 ft., the length 160 ft. Considering that 40 ft. is about the normal width of the naves of the largest French and English cathedrals, such a span is



714. Interior of Collegiate Church, Manresa. (From Street.)

gigantic, though with the internal buttresses of the side chapels it presented no great difficulty of construction. Indeed, when we remember that in their vaulted halls the Romans had adopted 80 ft. (vol. i. p. 319) as the normal span of their intersecting vaults, it is not its novelty or mechanical boldness that should surprise us so much as its appropriateness for Christian worship. As might be expected, there is a little awkwardness in the junction of the two designs. It is easy to see what an opportunity the eastern end of the great nave offered to a true artist, and how a Northern architect would have availed himself of it, and by canopies and statues or painting have made it a masterpiece of decoration. It is too much to expect this in Spain; but it probably was originally painted, or at least intended to be. Otherwise it is almost impossible to understand the absence of string-courses or architectural framings throughout, But, even as it stands, the church at Gerona must be looked upon as one of the most successful designs of the Middle Ages, and one of the most original in Spain.

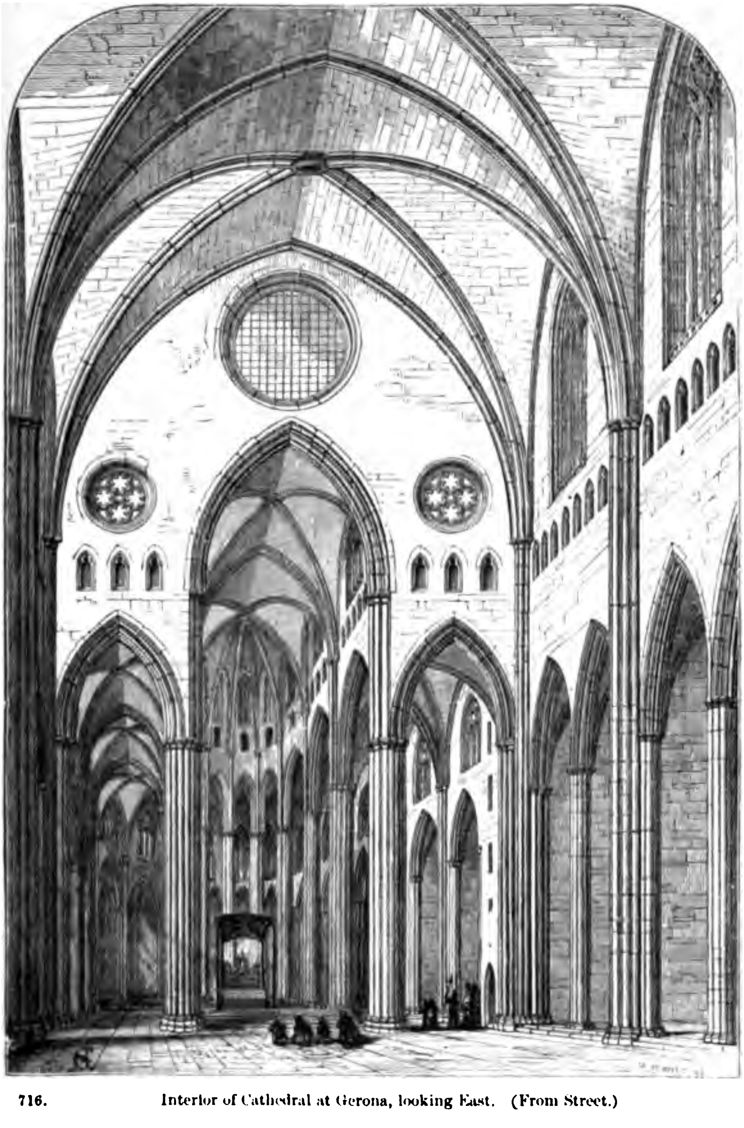


716. Plan of Cathedral at Gerona. (Reduced from Street's to 100 ft. to 1 in.)

The cimborio had somewhat gone out of fashion in the North of Spain in the 15th century, and with these very wide naves had become not only difficult to construct, but somewhat inappropriate.

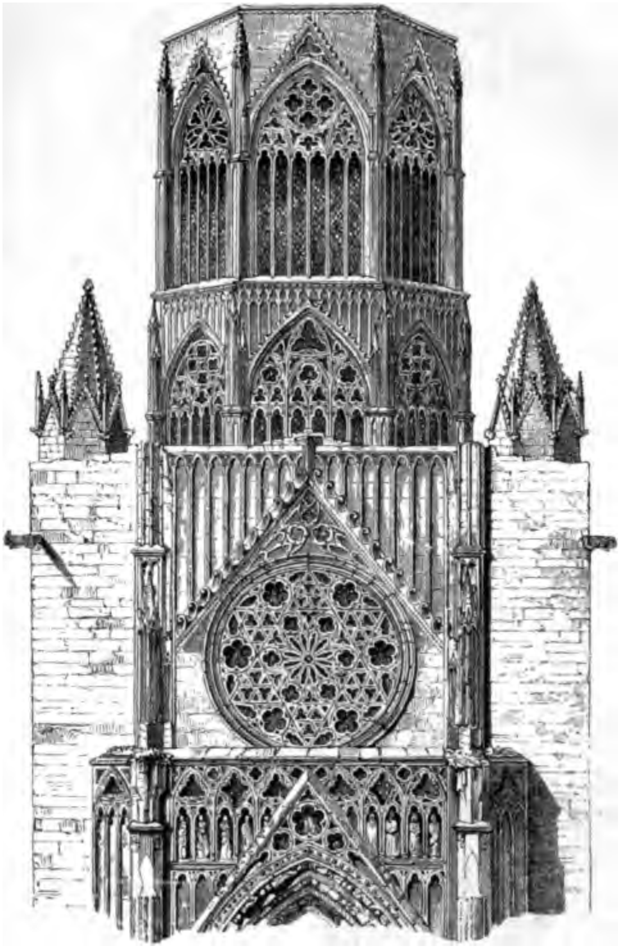
Still there are examples, such as that at Valencia (Woodcut No. 717), which, externally at least, are very noble objects. The church at Valencia seems to have been erected in 1404, and probably it was originally intended to have added a spire or external roof of some sort to the octagon. So completed, the tower would have been a noble central feature to any church, though hardly so perfect in design as that of the old cathedral at Salamanca (Woodcut No. 699).

Of about the same age (1401) is the great cathedral of Seville, the largest and in some respects the grandest of Mediæval cathedrals. Its plan can, however, hardly be said to be Gothic, as it was erected on the site of the Mosque which was cleared away to make room for it, and was of exactly the same dimensions in plan (Woodcut No. 718). It consists of a parallelogram 415 ft. by 298, exclusive of the sepulchral chapel behind the altar, which is a cinque-cento addition. It thus covers about 124,000 sq. ft. of ground, more than a third in excess of the cathedral at Toledo (75,000), and more than Milan (108,000 ft.), which, next to Seville, is the largest of Mediæval creations. The central aisle is 56 ft. wide from centre to centre of the columns, the side-aisles 40 ft., in the exact proportion of 7 to 10, or of the side of an isosceles right-angled triangle to the hypothenuse. As will be explained hereafter, this is the proportion arrived at from the introduction of an octagonal dome in the centre of the building, though it may have arisen here from the existence of an octagonal court in the centre of the mosque; but, be that as it may, it is a far more agreeable proportion than the double dimension generally adopted by Gothic architects, and probably the most pleasing that has yet been hit upon. Unfortunately no section of the cathedral has been published, but the nave is said to be 145 ft. in height, and the side-aisles



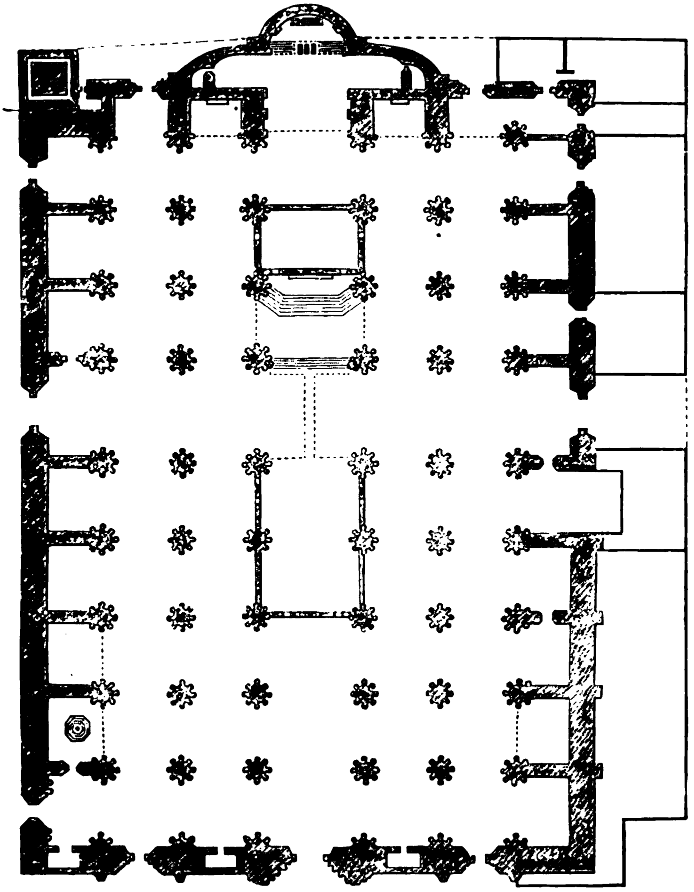
716. Interior of Cathedral at Gerona, looking East. (From Street.)

seem to be in as pleasing proportion to it in height as they are in plan, so that, though different from the usually received notions of what a Gothic design should be, it is an invention that would well bear to have been further followed out. Perhaps it might have been, had it not come so late. The cathedral was only finished about 1520, when St. Peter's at Rome was well advanced.



717. Cimborio of Cathedral at Valencia. (From Chapuy.)

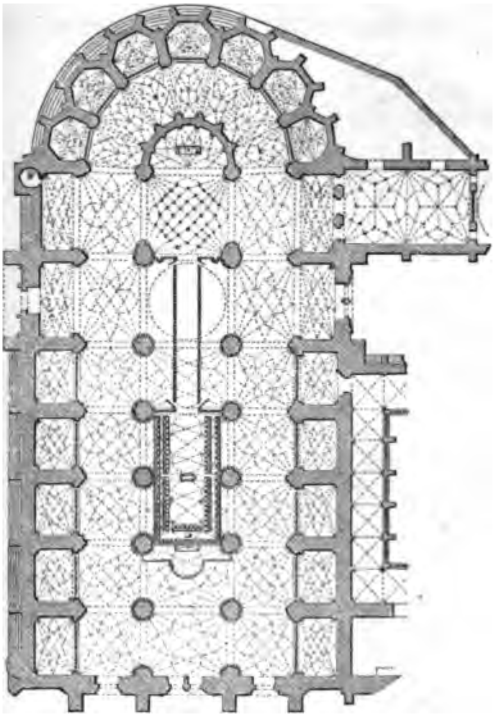
The architect of this noble building is not known, but he was probably a German acting under Spanish inspiration, as at Milan we find a German carrying out an Italian design with just that admixture of foreign feeling which seems to prevail at Seville. When, however, we consider what was done at Barcelona so shortly before, or at Segovia so soon afterwards, we need hardly be surprised if a Spanish architect really built this cathedral also. Those features which to us have a foreign aspect may really be peculiarities forced upon him by having to suit his church to the lines of a mosque, and there may be forms in Andalusian architecture derived from Moorish examples with which we are not so familiar as with those which the Northern provinces derived from France. But, be this as it may, Spain may well feel pride in possessing a cathedral which is certainly the largest of those of the Middle Ages, as well as far more original in design than Toledo or any that were built under French influence. These remarks apply only to the interior. Externally it never was completed, and those parts which are finished were erected so late in the style that their details are far from pleasing in form or constructively appropriate.



718. Plan of Cathedral at Seville. Scale 100 ft. to 1 in.

LATE SPANISH GOTHIC.

The last stage of Spanish Gothic was not less remarkable than those which preceded it, and perhaps more original. At the time when other Continental nations were turning their attention to the introduction of the classical styles, Spain still clung to the old traditions, and actually commenced Gothic cathedrals in the 16th century. A new cathedral was designed in the year 1513, for Salamanca, to supersede the old one; and another very similar both in dimensions and style was commenced at Segovia in 1523.[1] Both these churches are practically five-aisled, but as they have three free aisles and two ranges of chapels between the internal buttresses, making a total internal width of 160 ft., with an internal length of twice that dimension, no fault is to be found with their internal proportions. But their details want that purity and subordination so characteristic of the earlier styles.



719. Plan of Cathedral at Segovia. (Reduced from Street.) Scale 100 ft. to 1 in.

Their great peculiarity, however, consists in the extreme richness and elaboration of their vaults. In this respect they more resemble St. Jacques, Liège (Woodcut No. 446), and some of the late German churches, than anything to be found nearer home. But, wherever derived from, the practice of thus ornamenting the vaults at this late date contrasts singularly with what was done in earlier stages of the style.

One of the defects of Spanish architecture, after the earliest examples in the round-arched forms, is the poverty of its vaults. Generally they are like those of the French; but owing to the vast extent they attained at Gerona, Manresa, and elsewhere, the one lean rib in the centre and the absence of any ridge-rib make themselves more painfully felt than even in the French examples. When in the 16th century the architects tried to obviate this defect, it was not done as in England by constructive lines representing the arches, but by waving curved lines spread capriciously over the vault, which was thus certainly enriched, but can hardly be said to have been adorned.

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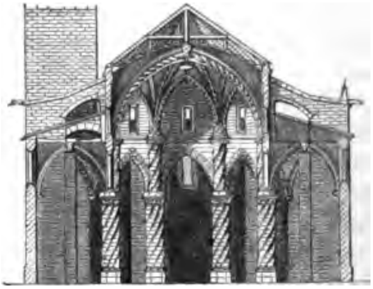
[1] The church of St. Eustache at Paris was commenced as late as 1532, and, although its plan is almost as Gothic as those of the Spanish examples, the details of the French church are far more essentially Renaissance throughout.

In one or two instances, the late Gothic architects aimed at the introduction of new principles, not perhaps in the best taste, but still so striking as to merit attention. In the church at Villena (1498–1511), for instance, all the columns are ornamented with spiral flutings so boldly executed as to be very effective; and as this spiral ornament is consistently carried throughout the design, and the parts are sufficiently massive not to look weakened in consequence, the whole design must be admitted to be both pleasing and original.



720. Section of Church at Villena. From 'Mon. Arch. d'Espana.' Scale 50 ft. to 1 in.

The exteriors of these 16th-century churches have a much more modern look than their interiors. From the buttresses being internal, the external walls are perfectly flat, generally terminating upwards by a cornice more or less classical in design. The windows are frequently without tracery, and are ornamented with balconies, and Renaissance ornaments are often intermixed with those of Gothic form in a manner more picturesque than constructive. At times, however, they exhibit such a gorgeous exuberance of fancy that it is impossible to avoid admiring, though we feel at the same time that it would be heresy to the principles of correct criticism to say that such a style was legitimate.

Among the minor examples of the age, perhaps the most remarkable is the church or chapel of San Juan de los Reyes at Toledo, built by Ferdinand and Isabella as a sepulchral chapel for themselves, though not used for that purpose. It is thus the exact counterpart of our Henry VII.'s Chapel, and of the church at Brou in Bresse. As its founders were at the time of its erection among the richest and most prosperous sovereigns in Europe, all that wealth could do was lavished on its ornamentation. It is as rich as our example, and richer than the French one. But, on the whole, the palm must be awarded the English architect. There is more constructive skill, and the construction is better expressed, at Westminster, than either at Toledo or Brou; though it is difficult not to feel that the money in all these cases might have been better expended on a larger and purer style of art.

Some parts of the church of San Miguel at Xeres exceed even this in richness and elaborateness of ornament, and surpass anything found in Northern cathedrals, unless it be the tabernacle-work of some tombs, or the screens of some chapels. In these it is always applied to small and merely ornamental parts. In Spain it is frequently spread over a whole church, and thus, what in a mere subordinate detail would be beautiful, on such a scale becomes fatiguing, and is decidedly in very bad taste.

It would be tedious to attempt to enumerate or describe the other cathedrals of Spain, or the numerous conventual or collegiate churches, many of which are still in use, with their cloisters and conventual buildings nearly complete. In this respect Spain is nearly as rich as France; while she possesses, in proportion to her population, a larger number of important parochial churches than that country, though inferior in that respect to England. The laity seem during the Middle Ages to have been of more importance in the Spanish Church than they were north of the Pyrenees, and the tendency of the architecture therefore was to provide for their accommodation. If, however, any such feeling then existed, it was carefully stamped out by the Inquisition after the fall of Granada. It would be interesting, however, to trace it back, and try to ascertain the cause whence it arose. Was it that the Aryan blood of the Goths was then more prevalent, and that the Iberian race has since become more dominant? Whatever the cause, it is one of those problems on which architecture may hope to throw some light, and to which, consequently, it is most desirable that the attention of architects should be turned.

MORESCO STYLE.

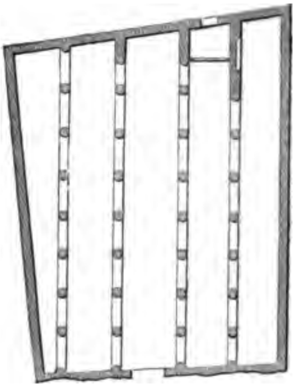
While Gothic churches were being erected under French influence in the north and centre of Spain, another style was developing itself under Moorish influence in the south, which in the hands of a more artistic people than the Spaniards might have become as beautiful as any other in Europe. It failed, however, to attain anything like completeness, primarily because the Spaniards were incapable of elaborating any artistic forms, but also perhaps because the two races came to hate one another, and the dominant people to abhor whatever belonged to those they were so cruelly persecuting.

If we knew more of the ethnic relations of the Moors, who conquered Spain in the 8th century, we might perhaps be able to predicate whether it were possible for such dissimilar parents to produce a fertile hybrid. It seems certain, however, that the Moors did not belong to any Turanian race, or traces of their tombs would be found;

but none such exist. Nor did they belong to any of the great building races, for during the whole of their sojourn in Spain they showed no constructive ability, no skill in arrangement of plans, and no desire for architectural magnificence. But they were a rich, luxurious, and refined people, possessing an innate knowledge of colour and an exquisite perception of the beauty of form and detail. They were, in fact, among the most perfect ornamentists we are acquainted with, but they were not architects. Had the inhabitants of Toledo from the 11th century been French, or any Celtic race, the combination of their constructive skill with the taste in detail of the Moors could hardly have failed to produce the happiest results. As it was, after a few feeble efforts the style died out, but not without leaving some very remarkable specimens of architectural art, though on a small scale. They were also only in perishable plaster, which, though well suited to the style of the Moors, is a material which no architectural people ever would have employed.

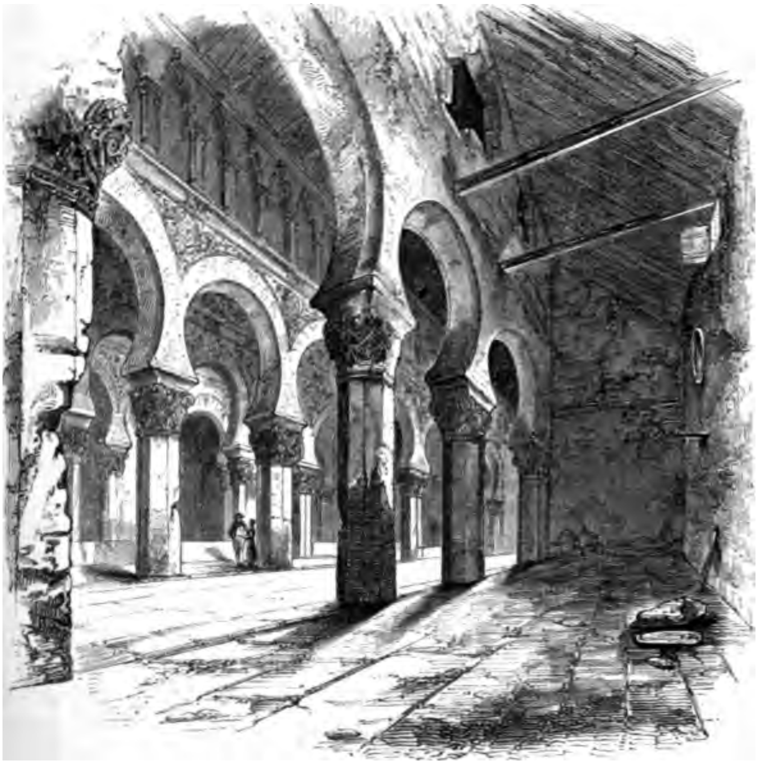
As might be expected, the principal examples of this style are to be found in or about Toledo, but specimens exist in almost every province of Spain up to the very roots of the Pyrenees, and its influence is often felt in the extreme richness of ornamentation into which the architects of Spain were often betrayed, even when expressing themselves in Gothic or Renaissance details.

Among the examples at Toledo the two best interiors seem to be the church of Sta. Maria la Blanca and that of Nuestra Senora del Transito, both originally built as synagogues, though afterwards appropriated to Christian purposes. The first is said to have been erected in the 12th century, and was appropriated by the Christians in 1405. As will be seen by the plan, it is an irregular quadrangle, about 87 ft. by 65 ft. in width across the centre, and divided into five aisles by octagonal piers supporting horse-shoe arches. Above these now runs what may be called a blind clerestory, though it appears as if light were originally admitted through it, by counter-sinkings in the roof, as suggested by the hypæthron of Greek temples (Woodcuts Nos. 150, 153). The objects are so dissimilar that it is difficult to institute a very distinct comparison between the synagogue and a contemporary Gothic church of the same dimensions; but it may safely be said that if the Northern style is grander in conception, this is far more elegant in detail: the essential difference lying in the fact that the Gothic style always had, or aimed at



721. Sta. Maria la Blanca. (From 'Mon. Arch.') Scale 50 ft. to 1 in.

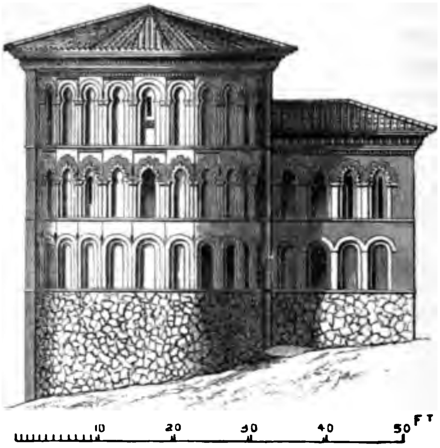
having, a vault, and consequently forced the architects to work and think—the very difficulty of the task being thus the cause of its success. The Saracens in Spain, on the contrary, never attempted either a vault or a dome, but were always content with an easily constructed wooden roof, calling for no ingenuity to design, and no thought how to convert its mechanical exigences into artistic beauties. The Moorish architects could play with their style, and consequently produced fascinating elegances of detail; the Gothic architects, on the contrary, were forced to work like men, and their result appeals to our higher intellectual wants; though in doing so they frequently neglected the polish and lighter graces of style which are so pleasing in the semi-Asiatic art of the South of Spain.



722. Sta. Maria la Blanca. (From Villa Amil.)

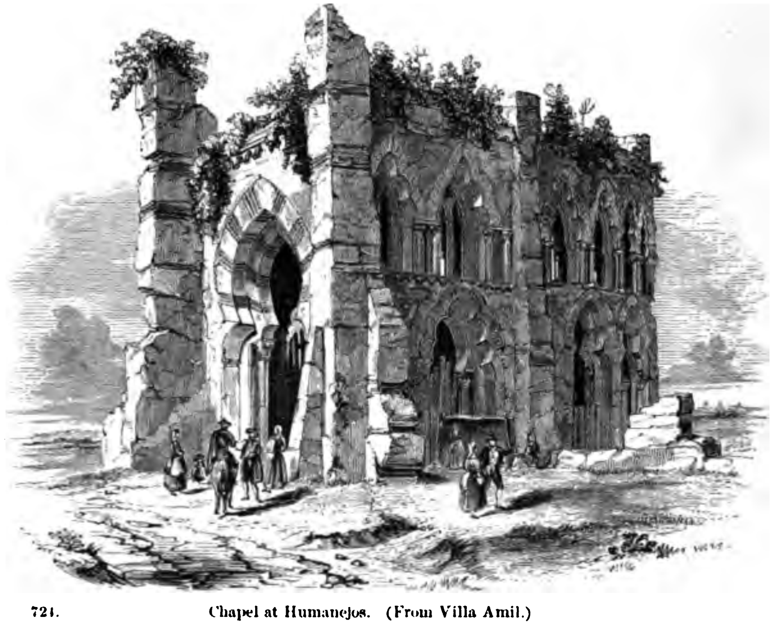
The other synagogue—del Transito—we know was completed in 1366. It is merely a large room, of pleasing proportion, the walls of which are plain and solid up to about three-fourths of their height. Above this a clerestory admits the light in a manner singularly agreeable in a hot climate. The roof is of wood, of the form called *Artesi-*

nado in Spain, from its being something in the form of an inverted trough—with coupled tie-beams across, so that, though elegant in detail, it has no constructive merit, and the whole depends for its effect,[1] like all Moorish work in Spain, on its ornamental details.



723. Apse of St. Bartolomeo. (From 'Mon. Arch.') Scale 25 ft. to 1 in.

All the churches we know of in this style date within the period comprised between the fall of Toledo (1085) and that of Granada (1492). During that time the Moors were still sufficiently powerful to be respected and their art tolerated. After their expulsion from their last stronghold, fear being removed, bigotry became triumphant, and persecution followed, not only of the people and their religion, but of everything that recalled either to remembrance.



724. Chapel at Humanejos. (From Villa Amil.)

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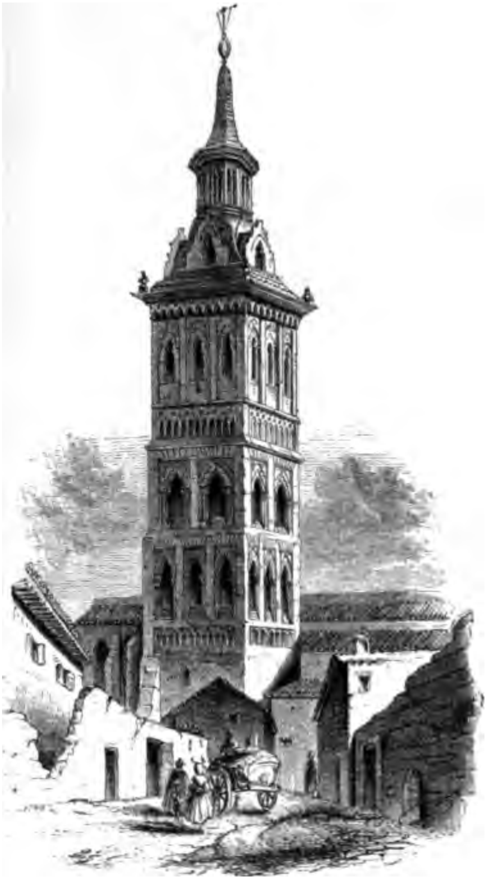
[1] The room called Paranimfo in the University of Alcala (see Woodcut No. 88, vol. iv.) is of precisely similar design to this, only carried out with Renaissance instead of Moorish detail.

It is possible that some larger and more important churches than those we now find were erected during this period in this style; but if so, they have perished. One of the largest at Toledo, San Bartolomeo, has an apse (Woodcut No. 723), little more than 30 ft. across over all, and others, such as Santa Fé, Santa Leocadia, San Eugenio, or Santa Isabel, are all smaller, St. Ursula alone being of about the same dimensions with St. Bartolomeo. The decoration of the apse of the latter will afford a fair idea of the style of detail adopted in these churches. For brick architecture it is singularly appropriate. It admits of more or less light, as may be required. It is crowned by a cornice of pleasing profile, and the whole is simpler and better than the many-buttressed and pinnacled apses of the Gothic architects.

A more picturesque example, though not so pure as that last quoted, is found in the little chapel of Humanejos in Estremadura (Woodcut No. 724). As will be observed from the woodcut, there is some 13th-century tracery in its windows, thus revealing its date as well as betraying its origin, and but for which it might almost be mistaken for an example of pure Saracenic architecture.

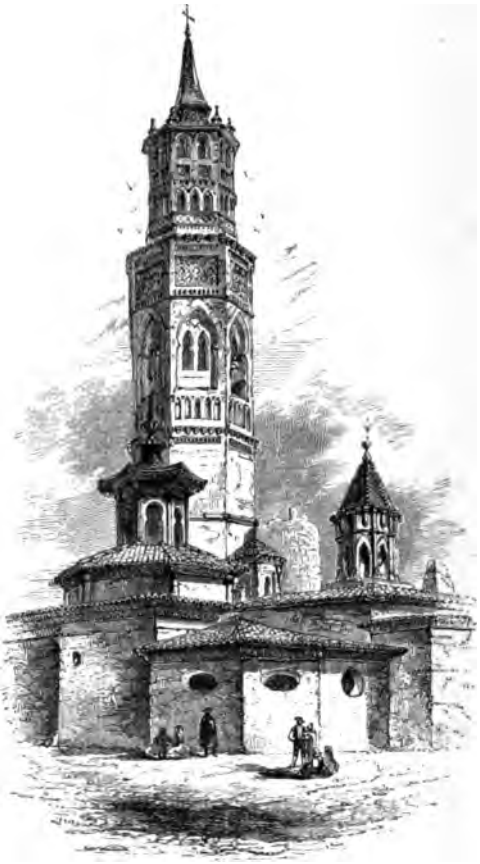


725. Tower at Illescas. (From Villa Amil.)

This is even more the case in a beautiful chapel in the monastery of the Huelgas, near Burgos, which, were it not for some Gothic foliage of the 14th century, introduced where it can hardly be observed, might easily pass for a fragment of the Alhambra. The same is true of many parts of the churches at Seville. That of La Feria, for instance, and the apse of the church of the Dominicans at Calatayud, are purely in this style, and most beautiful and elaborate specimens of their class.

Very pleasing examples of the adaptation of Moorish art to Christian purposes are to be found in various churches throughout Spain. That of St. Roman at Toledo[1] is a very pleasing and pure example of the style, but neither so picturesque nor so characteristic as that at Ilescas (Woodcut No. 725), not far from Madrid, which, though differing essentially from any Gothic steeple, is still in every part appropriately designed, and, notwithstanding its strongly marked horizontal lines, by no means deficient in that aspiring character so admirable in Gothic steeples.

Another remarkable example is the tower and roof of the church of St. Paul, Saragoza. It is so unlike anything else in Europe, that it might pass for a church in the Crimea or the steppes of Tartary. As if to add to its foreign aspect, the tiles of the roof are coloured and glazed, thus rendering the contrast with Gothic art stronger than even that presented in the details and forms of the architecture.



726. St. Paul, Saragoza. (From Villa Amil.)

The Church of St. Thomé at Toledo has a tower so perfectly Moorish in all its details, that but for its form it might as well be classed among the specimens of Moorish as of Mozarabic architecture. Throughout Spain there are many of the same class, which were undoubtedly erected by the Christians. Both in this country and in

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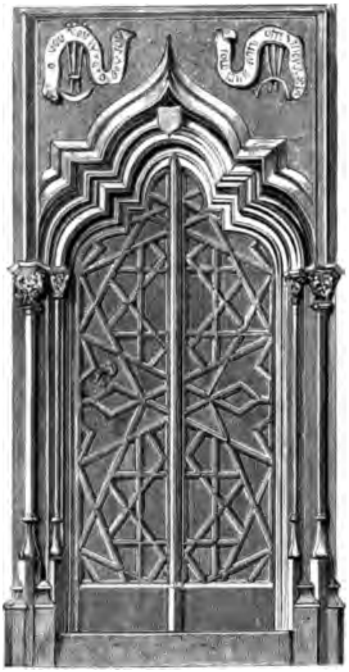
[1] An engraving of this tower is given in Street's 'Gothic Architecture in Spain,' page 225, accompanied with a very complete enumeration of all the examples of the style to be found in Toledo.

Sicily it is never safe to assume that because the style of a building is Moorish, even purely so, the structure must belong to the time when the Moors possessed the country, or to a happy interval, if any such existed, when a more than usually tolerant reign permitted them to erect edifices for themselves under the rule of their Christian conquerors.

Sometimes we find Moorish details mixed up with those of Gothic architecture in a manner elsewhere unknown, as for instance in the doorway, in Woodcut No. 727, from the house of the Ablala at Valencia. The wood-work is of purely Moorish design, the stone-work of the bad unconstructive Gothic of the late Spanish architects, altogether making up a combination more picturesque than beautiful, at least in an architectural point of view.



727. Doorway from Valencia. (From Chapuy.)

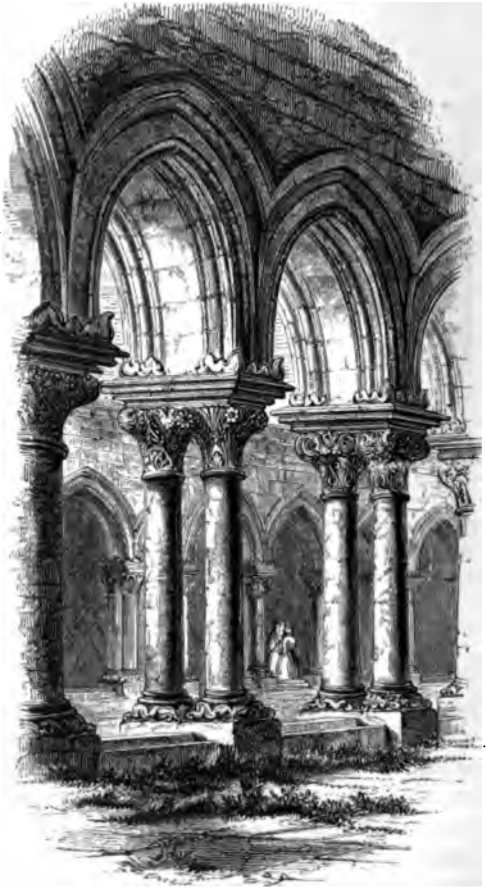
CHAPTER III.

CIVIL ARCHITECTURE.

CONTENTS.

Monastic Buildings — Municipal Buildings — Castles.

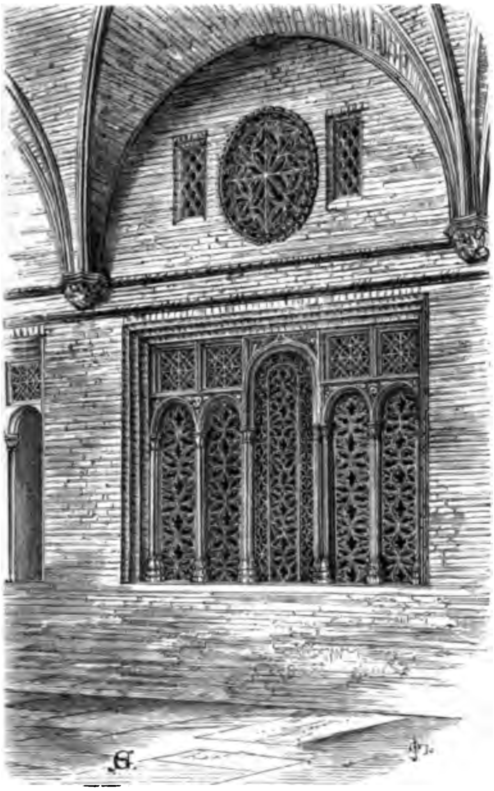
Monastic Buildings.



728. Cloister of the Huelgas, near Burgos. (From Villa Amil.)

As already mentioned, to most of the great churches described above there were attached monastic establishments on a scale commensurate with them in dignity, and ornamented in an equal degree. Most of these, too, had chapter-houses, generally square vaulted apartments, not equal in originality or magnificence with those of England, but very superior to anything found in France. The most ornamental part of these is generally the screen of triple arches by which they open on the cloister. Internally they are now generally plain, but they may have been adorned with wooden stalls and furniture, which have since disappeared.

More important than these are the cloisters to which they were attached — the *patio* of the convent, which in such a climate as that of Spain was an indispensable adjunct, and much more appropriate than a covered arcade ever was or could be in our northern climate. The Spanish architects seem, in consequence, to have revelled in the designs of their cloisters, and from the simple arcade of Gerona (1117) to the exuberant caprice of San Juan de los Reyes, they form a series of examples completely illustrative of the progress of Spanish art: perhaps more so than even the churches to which they are attached.

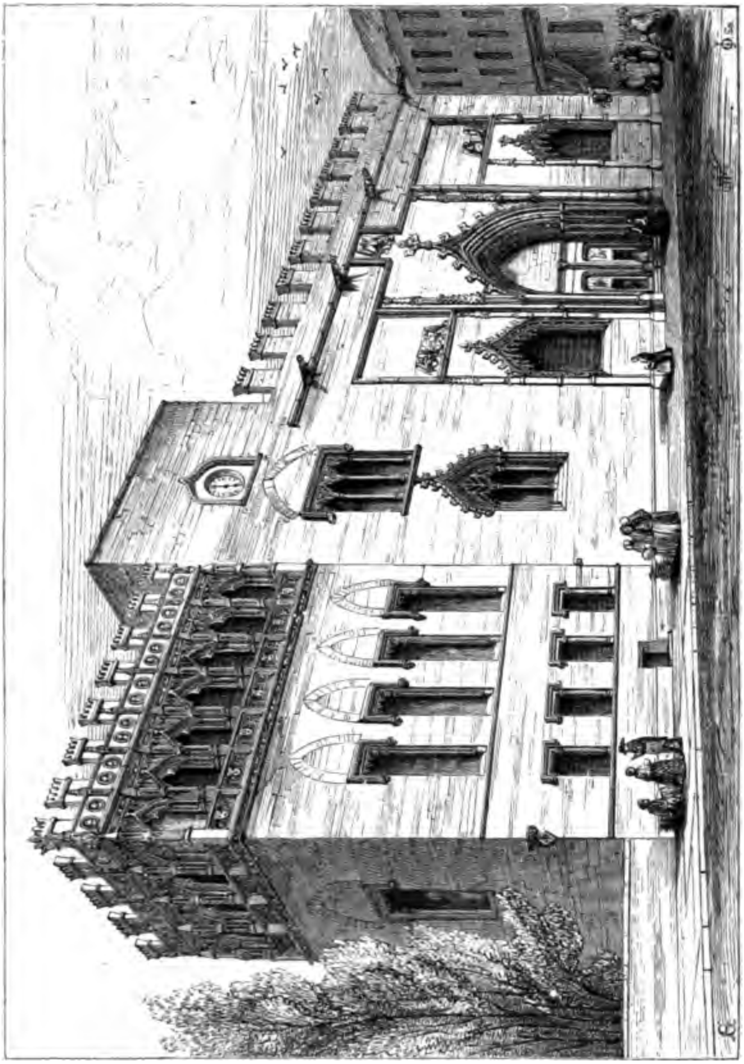


729. Cloister, Tarazona. (From Street.)

The favourite form of the earlier examples, like those in the South of France (Woodcut No. 325), is that of an open arcade supported on coupled columns, on the capitals of which the architects delighted to lavish all their powers of variety and design. That at the convent of the Huelgas (Woodcut No. 728) gives a fair idea of the mode in which they are carried out, and is certainly far more appropriate than the traceried arches of Northern examples, which, without glazing, are most unmeaning. During the 14th and 15th centuries the Spaniards adopted them, and some of the best specimens of their traceries are to be found in the cloister arcades. Having gone so far, however, they went on, and carried the idea to its legitimate conclusion by filling up the whole opening with a screen of pierced tracery. The most complete example of this style is that found at Tarazona in Aragon. The cloister itself is in brick, but not even plastered; the openings are filled with stone slabs pierced with the most varied and elegant Gothic tracery. It would seem a more reasonable plan to have used stone for the structure and terra-cotta for the openings; but as it is, the effect of the whole is extremely pleasing. It is, however, more like an Oriental than an European design, and reveals as clearly as the churches of Toledo the continued presence of the Moor in the land of Spain.

Municipal Buildings.

Spain does not seem to have possessed, during the Middle Ages, any municipalities of sufficient importance to require buildings of an important or permanent character for their accommodation. There are, it is true, one or two Lonjas, or places for the assembly of merchants, which are of some magnificence. But these were erected on the very verge of the Renaissance, and betray all the feebleness of an expiring style. That at Valencia is, perhaps, the best example.

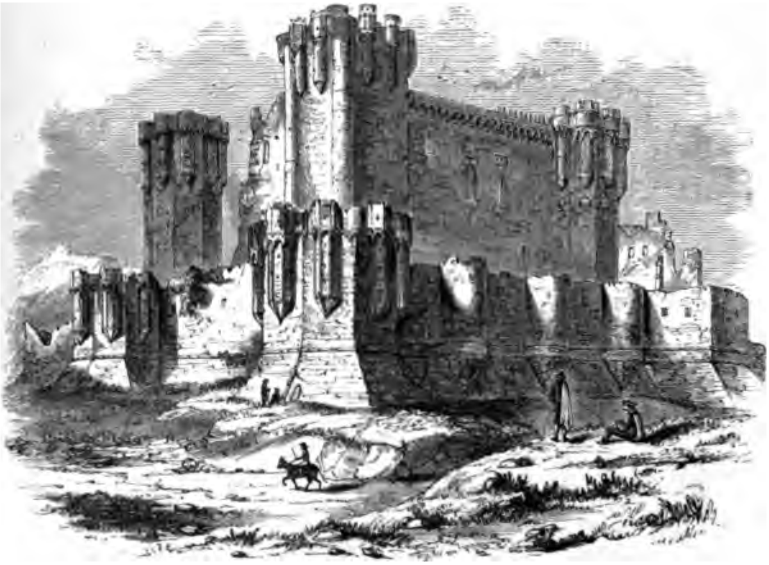


730. The Casa Lonja, Valencia. (From Street.)

Internally it has twisted columns similar to those at Villena (Woodcut No. 720). The two buildings are said to have been designed by the same architect, but the columns in this instance are much more attenuated than in the church. The exterior has at least the merit of expressing the internal arrangements. On one side of the central tower is the great hall, on the other the public rooms, and above these an upper storey with an open arcade. The last is a feature very frequently found in Spain, not only in Mediæval palaces, but in those of the Renaissance period, and wherever it exists it is one of the most pleasing that can be found; it gives all the shadow of a cornice, without its inconvenient and useless projection, and crowns the whole design in an appropriate and pleasing manner.

Castles.

One example must suffice to recall attention to the fact of the existence of "Chateaux en Espagne." On the plains of Castille they are not only numerous, but of great magnificence; erected apparently before the fear of inroads from the Moors of Granada had passed away, or at all events when a military aristocracy was indispensable to save the nation from reconquest by these dreaded enemies. Of these the Kasr at Segovia is one of the best known and most frequently drawn. It has the advantage of being still inhabited, and its turrets retained, till recently, their tall conical roofs, which gave



731. Castle of Cocos, Castille. (From Villa Amil.)

it so peculiar and local an aspect.[1] It also possesses the advantage—rare in Spanish castles—of standing on the edge of a tall rock, to which it has been fitted with almost Oriental taste.

Another favourable specimen is the now ruined castle of Cocos. Its tall towers and clustering turrets still attest its former magnificence, and point to a local style of defensive architecture differing from that of any other part of Europe, but even more picturesque than the best examples of either France or England. The castle at Olite is still more local in its style. Many other examples might be quoted; but they hardly belong to the fine-art branch of Architecture, and thus scarcely come within the scope of this work, though a monograph of the military architecture of Spain during the Middle Ages would be almost as interesting as that of her ecclesiastical remains.

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[1] These were destroyed by a fire which occurred some fourteen years ago.

CHAPTER IV.

PORTUGAL.

CONTENTS.

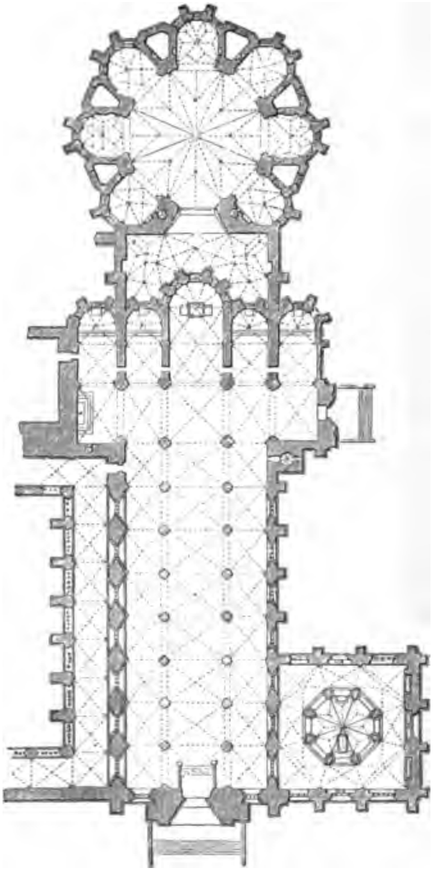
Church of Batalha — Alcobaça — Belem.

So little attention has been paid to the subject of Gothic architecture in Portugal, that it is by no means clear whether it contains any churches of interest belonging to that style. There are certainly some splendid remains at Belem near Lisbon, and fragments at least elsewhere; but those who have described them are so little qualified for the task by previous study, that it is impossible to place reliance on the correctness of their assertions regarding them. One church, however,—that at Batalha,—has met with a different fate, and having arrested the attention of Mr. Murphy, "the illustrator of the Alhambra," was drawn by him, and published in a splendid folio work at the end of the last century. As might be supposed from the date of the work, the illustrations do not quite meet the exigences of modern science, but it is at all events one of the best illustrated churches in the Peninsula, and seems in some respects to be worthy of the distinction, being certainly the finest church in Portugal.

It was erected by King John of Portugal, in fulfilment of a vow made during a battle with his namesake of Spain in the year 1385, and was completed in all essentials in a very short period of time. From the plan (Woodcut No. 732) it will be seen that the form of the original church is that of an Italian basilica—a three-aisled nave ending in a transept with five chapels; the whole length internally being 264 ft., and the width of the nave 72 ft. 4 in. It is therefore a small building compared with most of the Gothic churches hitherto described. To the right of the entrance, under an octagonal canopy which once supported a German open-work spire, are the tombs of the founder and of his wife Philippa, daughter of John of Gaunt; beyond this the octagon expands into a square, in a very Eastern fashion, to accommodate the tombs of other members of the royal family who are buried around. The whole design of this part is one of the most suitable for a family sepulchre to be found anywhere. The wonder, however, of the Batalha, or rather what would have been so had it been completed, is the tomb-house which Emanuel the Fortunate commenced for himself at the east end of the church.

Similar chapels at Burgos and Murcia have already been noticed, but this was to have surpassed them all, and if completed would have been the most gorgeous mausoleum erected during the Middle Ages.

It is curious to observe how the tradition of the circular tombhouse behind the altar remained constant in remote provinces to the latest age. The plan of this church is virtually that of St. Martin at Tours, of St. Benigne at Dijon (Woodcuts Nos. 341, 343), and of other churches in Aquitania. It is easy to see how by removing the intermediate walls this basilica would become a chevet church, complete except for the difference in the span of the two parts. Had the mausoleum been finished, the wall separating it from the church would not improbably have been removed.



732. Plan of the Church at Batalha. (From Murphy.) Scale 100 ft. to 1 in.

The plan of this tombhouse is interesting as being that of the largest Gothic dome attempted, and as showing how happily the Gothic forms adapt themselves to this purpose, and how easily any amount of abutment may be obtained in this style with the utmost degree of lightness and the most admirable play of perspective; indeed no constructive difficulties intervene to prevent this dome having been twice its present diameter (65 ft.); in which case it would have far surpassed Sta. Maria del Fiore and all the pseudo-classical erections that have since disfigured the fair face of Europe.

Generally speaking, neither the proportions nor the details of this church are good; it was erected in a country where the principles of Gothic art were either misapprehended or unknown, and where a lavish amount of expenditure in carving and ornament was thought to be the best means of attaining beauty. The church from this cause may almost be considered a failure; its two sepulchral chapels being in fact by far the most interesting and beautiful parts of the structure. It may be observed also that the open-work spire agrees much better with the semi-Oriental decoration of the churches both of Burgos and Batalha than with the soberer forms of the more Northern style. One is almost tempted to fancy that the Germans borrowed the idea from Spain rather than that Spain imported it from the North. Till we know more of the age of the cathedrals of Leon, Oviedo, and other cities in the North of Spain, the point cannot be determined; but it seems by no means certain but that further knowledge will compel the Germans to resign their claim to this their single alleged invention in the pointed style.

Next in importance to the church at Batalha is that at Alcobaça, commenced in the year 1148, and finished in 1222. It is a simple and grand Cistercian abbey-church, not unlike that at Pontigny (Woodcut No. 409) in style. Its total length is 360 ft.; its height about 64. The nave is divided from the side-aisles by twelve piers, the arches of which support vaults of the same height over the three divisions—a circumstance which must detract considerably from the beauty of its proportions. The east end is terminated by a chevet (called by the Portuguese a *charola*) with nine chapels.

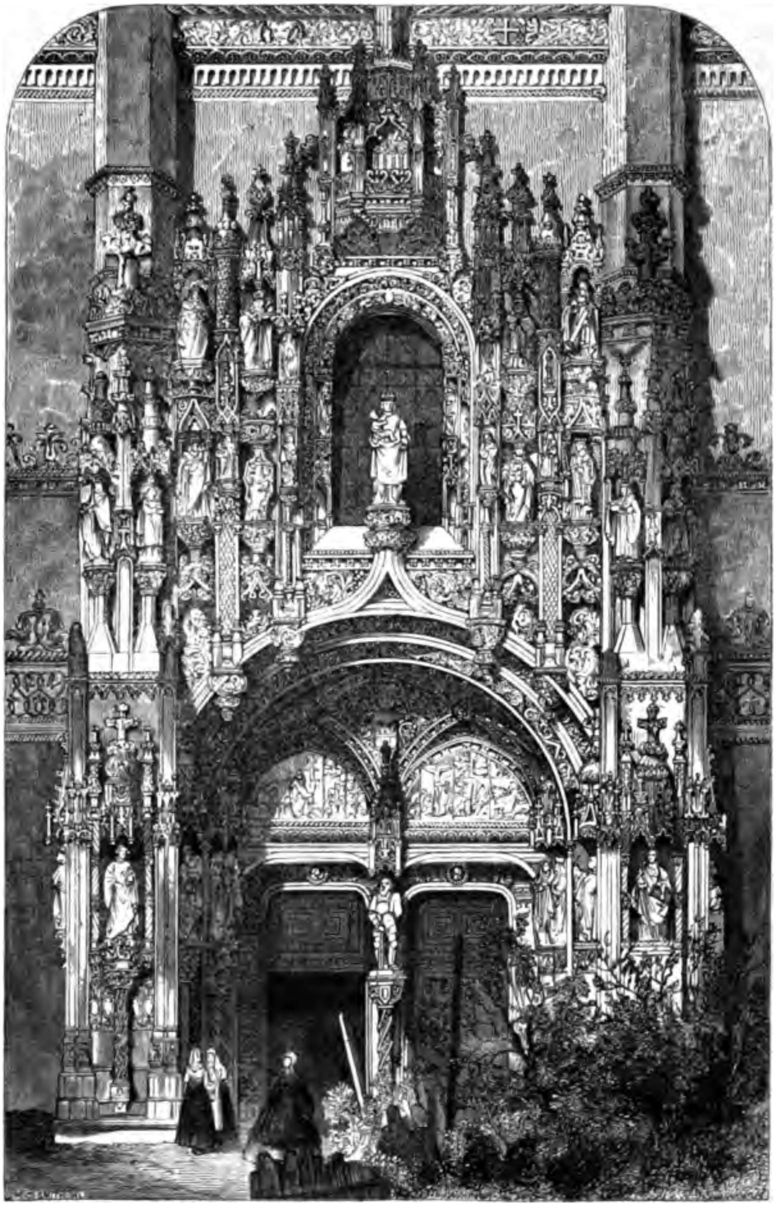
The monastery attached to this church, formerly one of the most splendid in the world, was burnt by the French in their retreat from Portugal.

At Coimbra there are still some remains of Gothic churches; the principal of these is the old cathedral, which, though much destroyed, still retains many features belonging to the same age as that of Alcobaça.

In the same town is the church of Sta. Cruz, rebuilt by French architects in the year 1515, in the then fashionable flamboyant style of their country; and in complete contrast to this is the small but interesting Round Gothic church of St. Salvador, erected about the year 1169.

The church of the convent at Belem near Lisbon, though one of the latest, was intended by its founder, Emmanuel the Fortunate, to be one of the most splendid in the kingdom. It was commenced in 1500, but not finished till long after the Renaissance had set in, so that (in the interior especially) it is very much disfigured by incongruities of every sort. The southern portal, however, is wholly in the style of the first years of the 16th century, and is as elaborate an example of the exuberant ornamentation of that age as can be found in the Peninsula. It is, of course, full of faults, and by no means worthy of imitation; but its richness in figure sculpture and in architectural carving is very impressive and pleasing, in spite of all that can be said against its taste.

No one who is familiar with the chapel at Roslyn can fail to recognise at once the similarity of design and detail between the two.



733. Façade at Belem. (From a Photograph.)

The Portuguese example is half a century more modern, for which allowance must be made. It is also more delicate, as the work of a

Southern people might be expected to be. Moreover, it is the work of men among whom the style arose, and who consequently were more at home in it than the Scotch builder could pretend to be; but notwithstanding all these deductions, there is a similarity between the style of the two buildings so remarkable as to leave no doubt of their common origin.

The other churches of Portugal, such as those of Braga, Guimaraens, &c., seem to have been of late flamboyant style, and generally are so much modernised that the little beauty they ever possessed is concealed or destroyed by modern details.

Notwithstanding the late age of the principal examples and the apparent paucity of those of an earlier time, it is still possible that Portugal may contain much to interest the archæologist. But travelling has hitherto been inconvenient and slow in that country, and it has not yet been visited, or at least described, by any one familiar with the peculiarities of Mediæval art. When properly explored, we may be surprised at the treasures it contains. On the other hand, it is by no means impossible that the 'Handbook of Portugal' is correct when it asserts that "There is no European country which has less interesting ecclesiology than Portugal. There are certainly not 150 old churches in the kingdom. The French invasion, the great earthquake, and the rage for rebuilding in the 18th century, have destroyed nearly all."

Let us hope it may not be so, but at present we have little beyond the hope to rely on.

BOOK VIII.

ITALY.

CHAPTER I.

INTRODUCTORY.

CONTENTS.

Division and Classification of the Mediæval Styles of Architecture in Italy.

CHRONOLOGY.

	DATES.		DATES.
Charlemagne	A.D. 768	Henry IV.	A.D. 1056
Conrad I.	911	Henry V.	1106
Henry the Fowler	918	Lothaire II.	1125
Otho the Great	936	Conrad III.	1138
Otho II.	973	Frederick Barbarossa	1152
Otho III.	983	Henry VI.	1190
Henry II.	1002	Frederick II.	1212
Conrad II.	1024	Conradin	1250
Henry III.	1039		

If a historian were to propose to himself the task of writing a tolerably consecutive narrative of the events which occurred in Italy during the Middle Ages, he would probably find such difficulties in his way as would induce him to abandon the attempt. Venice and Genoa were as distinct states as Spain and Portugal. Florence, the most essentially Italian of the republics, requires a different treatment from the half German Milan. Even such neighbouring cities as Mantua and Verona were separate and independent states during the most important part of their existence. Rome was, during the whole of the Middle Ages, more European than Italian, and must have a narrative of her own; Southern Italy was a foreign country to the states of the North; and Sicily has an independent history.

The same difficulties, though not perhaps to the same degree, beset the historian of art, and, if it were proposed to describe in detail all the varying forms of Italian art during the Middle Ages, it would be necessary to map out Italy into provinces, and to treat each almost as a separate kingdom by itself. In this, as in almost every instance, however, the architecture forms a better guide-line through the tangled mazes of the labyrinth than the written record of political events, and those who can read her language have before them a more trustworthy and vivid picture of the past than can be obtained by any other means.

The great charm of the history of Mediæval art in England is its unity. It affords the picture of a people working out a style from chaos to completeness, with only slight assistance from those in foreign countries engaged in the same task. In France we have two elements, the old Southern Romanesque long struggling with the Northern Celtic, and unity only obtained by the suppression of the former, wherever they came in contact. In Italy we have three elements,—the Roman, the Gothic, and the Byzantine,—sometimes existing nearly pure, at others mixed, in the most varying proportions, the one with the other.

In the North, the Gothic element prevailed nearly pure, except in so far as it was based on a Romanesque element, and was practised by a people who still clung to the traditions of imperial Rome, and who consequently allowed the classical forms to influence their art throughout the Middle Ages, to a far greater extent than was the case on this side of the Alps.

In the South, the Byzantine forms prevailed, partly because the art was there based on the traditions of Magna Grecia, and more, perhaps, from the intimate connexion that existed between Apulia and the Peloponnesus during the Middle Ages.

Between the two stood Rome, nearly unchanged and unchangeable —the three terms, Roman, Romanesque, and Renaissance comprise all the variation she submitted to. In vain the Byzantine besieged her on the south and the Gothic on the north. Their waves spent themselves on her rock without producing much impression, while her influence extended more or less over the whole peninsula. It was distinctly felt at Florence and at Pisa on the north and west, though these conquests were nearly balanced by the Byzantine influence which is so distinctly felt at Venice or Padua on the east coast.

The great difficulty in the attempt to reconcile these architectural varieties with the local and ethnographical peculiarities of the people —a difficulty which at first sight appears all but insuperable—is, that sometimes all three styles are found side by side in the same city. This, however, constitutes, in reality, the intrinsic merit of architecture as a guide in these difficulties. What neither the language of the people nor their histories tell us, their arts proclaim in a manner not to be mistaken. Just in that ratio in which the Roman, Byzantine, or Gothic style prevails in their churches, to that extent did either of these elements exist in the blood of the people. Once thoroughly master the peculiarities of their art, and we can with certainty pronounce when any particular race rose to power, how long its prevalence lasted, and when it was obliterated or fused with some other form.

There is no great difficulty in distinguishing between the Byzantine and the other two styles, though it is only after reading the next Book of this work that its peculiarities can be fully explained. Meanwhile, however, there is no difficulty in distinguishing between the Gothic and Byzantine form of dome. The latter is almost always rounded externally, the former always straight-lined. Again: the Byzantine architects never used intersecting vaults for their naves. If forced to use a pointed arch, they did so unwillingly, and it never fitted kindly to their favourite circular forms; the style of their ornamentation was throughout peculiar, and differed in many essential respects from the other two styles.

It is less easy always to discriminate between the Gothic and Romanesque in Italy. We frequently find churches of the two styles built side by side in the same age, both using round arches, and with details not differing essentially from one another. There is one test, however, which is probably in all cases sufficient. Every Gothic church had, or was intended to have, a vault over its central aisle. No Romanesque church ever attempted it. The importance of the distinction is apparent throughout. The Gothic churches have clustered piers, tall vaulting-shafts, external and internal buttresses, and are prepared throughout for this necessity of Gothic art. The Romanesque churches, on the contrary, have only a range of columns, generally of a pseudo-Corinthian order, between the central and side aisles; internally no vaulting-shafts, and externally only pilasters. Had these architects been competent, as the English were, to invent an ornamental wooden roof, they would perhaps have acted wisely; but though they made several attempts, especially at Verona, they failed signally to devise any mode either of hiding the mere mechanical structure of their roofs or of rendering them ornamental.

As before pointed out,[1] vaulting was the real formative idea of the Gothic style, and it continued to be its most marked characteristic during the continuance of the style, not only in Italy, but throughout all Europe.

As it is impossible to treat of these various styles in one sequence, various modes of precedence might be adopted, for each of which good reasons could be given; but the following will probably be found most consonant with the arrangement elsewhere adopted in this work:—

First, to treat of the Gothic styles of Northern Italy, because they complete our history of the style in Europe, and directly connect the countries on either side of the Alps; thus concluding the one branch of our subject and introducing the next.

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[1] Vol. i. p. 448 *et seq.*

Secondly, to take up the Mediæval Romanesque where we left that style in a previous chapter, and to point out the few remaining peculiarities which have not yet been described.

Lastly, to describe the Byzantine art as it was practised in the South of Italy: thus continuing the sequence up to the next Book, and leading the history by an easy gradation from the true Gothic of the West to the true Byzantine of the East.

Sicily will demand a chapter to herself; not only because a fourth element is introduced there in the Saracenic—which influenced her style almost as much as it did that of the South of Spain—but because such pointed Gothic as she possesses was not German, like that of Northern Italy, but derived far more directly from France, under either the Norman or Angiovine dynasties.

CHAPTER II.

LOMBARD AND ROUND-ARCHED GOTHIC.

CONTENTS.

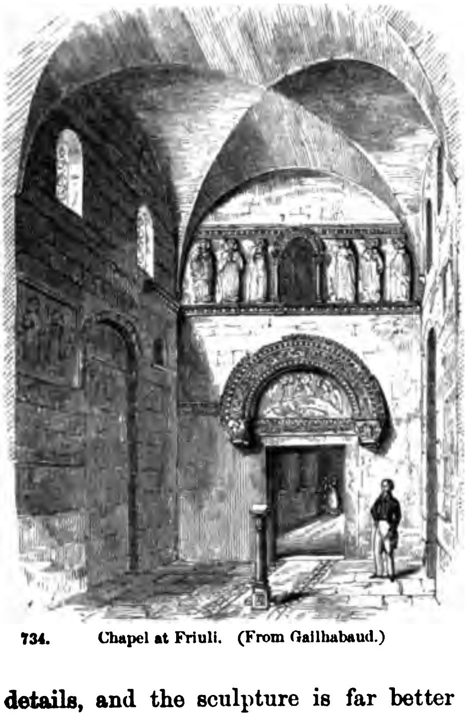
Chapel at Friuli — Churches at Piacenza. Asti, and Novara — St. Michele, Pavia — St. Ambrogio, Milan — Cathedral, Piacenza — Churches at Verona — Circular Churches — Towers.

When, in the early centuries of the Christian era, the great mass of Gothic barbarism moved up the Valley of the Danube towards the west, one great division followed that river to its source, and thence penetrated into and settled in the Valley of the Rhine. They were sufficiently numerous to be able almost wholly to obliterate all traces of former civilisation, and to invent that original style of architecture whose history was sketched in the fourth Book of this work.

The other great division of the horde turned the Sömmering Alps and penetrating into Italy by way of Udine and Conegliano, settled in the Valley of the Po. They may have been as numerous as the others; but Italy in those days was far more densely peopled than Germany, and the inhabitants were consequently able to resist obliteration far more successfully than on the north of the Alps, and even where the new element prevailed most strongly its influence was far less felt than in the more sparsely peopled Rhenish provinces. This was generally more apparent along the coast than in the interior. Venice long resisted, though Ravenna was overwhelmed. Pisa and Lucca resisted throughout. Florence was divided. The Barbarian influence was strongly felt at Siena, more feebly at Orvieto; but there it was stopped by the influence of Rome, which throughout the Middle Ages remained nearly uncontaminated.

Notwithstanding the almost insuperable barrier of the Alps which stretched between them and the different influences to which they were subjected, the connexion between the northern and southern hordes remained intimate during the whole of the Middle Ages. Milan was as much German as Italian; and, indeed, except from a slightly superior degree of elegance in the southern examples, it is sometimes extremely difficult to distinguish between the designs of Lombard and of Rhenish churches. As the Middle Ages wore on, however, the breach between the two styles widened, and there is no difficulty, in the later pointed schools, in seeing how Italy was gradually working itself free from German influence, till at last they became distinct and antagonistic nationalities, practising two styles of art, which had very little in common the one with the other.

Whoever the Barbarians were who in the 5th and 6th centuries swarmed into Italy—Austro-Goths, Visi-Goths, or Lombards—they certainly did not belong to any of the great building races of the world. Few people ever had better opportunities than they of employing their easily acquired plunder in architectural magnificence, if they had any taste that way; but, though we hear everywhere of the foundation of churches and the endowment of ecclesiastical establishments during the Carlovingian period, not one important edifice of that age has come down to our time. The monumental history of the Round Gothic style is as essentially a blank in Italy as it is in Saxon England. One or two circular buildings remain tolerably entire; some small chapels let us into the secrets of the style, but not one important edifice of any sort attests the splendour of the Lombard kingdom of Northern Italy. Aryans they must have been, and it was not till the beginning of the 11th century, when their blood was thoroughly mixed with that of the indigenous inhabitants and a complete fusion of races had taken place, that we find buildings of a monumental character erected, which have come down to the present day.

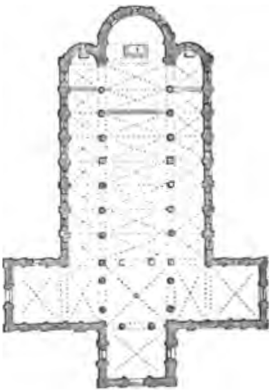


734. Chapel at Friuli. (From Gailhabaud.)

Among the smaller monuments of the age none has been preserved more complete and less altered than the little chapel at Friuli; which, though extremely small (only 18 ft. by 30 inside the walls), is interesting, as retaining all its decorations almost exactly as they were left by Gertrude, duchess of Friuli, who erected it in the 8th century. It shows considerable elegance in its details, and the sculpture is far better than it afterwards became, though perhaps its most remarkable peculiarity is the intersecting vault that covers it—*pulchre testudinatum*, as the old chronicle terms it. This is one proof among many, how early that feature was introduced which afterwards became the formative principle of the whole Gothic style, and was as essentially its characteristic as the pillars and entablatures of the five orders were the characteristics of the classical styles of Greece and Rome. As before remarked, it is this necessity for a stone roof that was the problem to be solved by the architects, and to accomplish which the style took almost all those forms which are so much admired in it.

From this example of the Carlovingian era we are obliged to pass to the 11th and 12th centuries, the first great building age of the Gothic nations. It is true that there is scarcely a single important church in Pavia, in Verona, or indeed in any of the cities of Lombardy, the original foundation of which cannot be traced back to a much earlier period. Before the canons of architectural criticism were properly understood, antiquaries were inclined to believe that in the buildings now existing they saw the identical edifices erected during the period of the Lombard sway. Either, however, in consequence of the rude construction of the earlier buildings, or because they were too small or too poor for the increased population and wealth of the cities at a later period, every one of the original churches has disappeared and been replaced by a larger and better constructed edifice, adorned with all the improvements which the experience of centuries had introduced into the construction of religious edifices.

Judging from the rudeness of the earliest churches which we know to have been erected in the 11th century, it is evident that the progress made, up to that period, was by no means equal to what was accomplished during the next two centuries.



735. Plan of San Antonio, Piacenza. (From Osten.[1]) Scale 100 ft. to 1 in.[2]

This will appear from the plan and section of St. Antonio at Piacenza (Woodcuts Nos. 735 and 736), built in the first years of the 11th century, and dedicated in 1014 by the bishop Siegfried.

Its arrangement is somewhat peculiar; the transepts are near the west end, and the octagonal tower rising from the intersection is supported on eight pillars, the square being completed by four polygonal piers. The principal point, however, to observe is, how completely the style has emancipated itself from all Roman tradition. A new style has grown up as essentially different from the Romanesque as the style of Cologne or of York Cathedral. The architect is once more at liberty to work out his own designs without reference to anything beyond the exigencies of the edifices themselves. The plan, indeed, is still a reminiscence of the Romanesque; but so are all the plans of Mediæval cathedrals, and we may trace back the forms of the pillars, the piers, and the arches they support, to the preceding style. All these are ultimately derived from Roman art, but the originals are forgotten, and the new style is wholly independent of the old one. The whole of the church too is roofed with intersecting vaults, which have become an integral part of the design, giving it an essentially Gothic character. On the outside, buttresses are introduced, timidly, it is true, but so frequently, as to make it evident that already there existed no insuperable objection to increase either their number or depth, as soon as additional abutment was required for wider arches.

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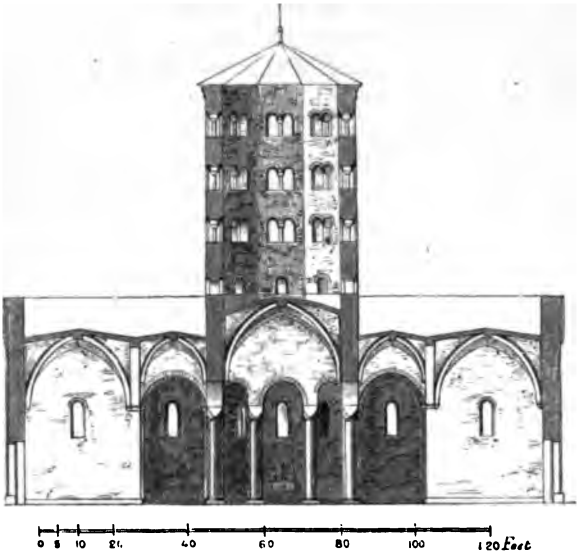
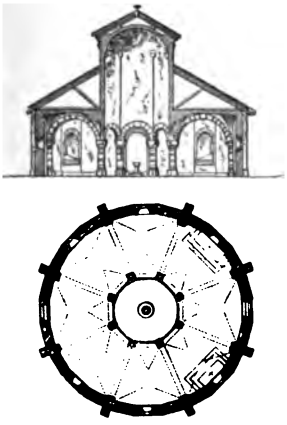
[1] Frederick von Osten, 'Bauwerke in der Lombardei.' Darmstadt, 1852.

[2] By an oversight of the engraver, the vault of the nave, which ought to be made hexapartite, is drawn as quadripartite.



736. Section of Church of San Antonio at Piacenza.* (From Osten.)

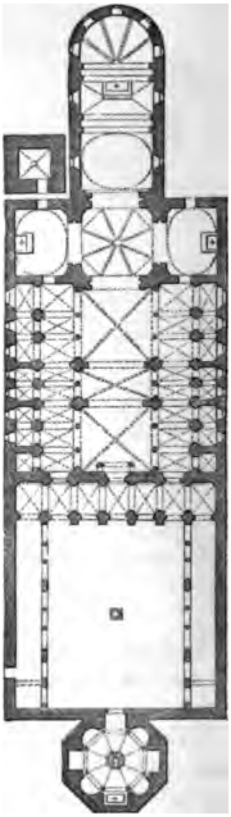


737. Section and Plan of Baptistery at Asti. (From Osten.) Scale 50 ft. to 1 in.

The windows, as in all Italian churches, are small, for the Italians never patronised the art of painting on glass, always preferring frescoes or paintings on opaque grounds. In their bright climate, very small openings alone were requisite to admit a sufficiency of light without disturbing that shadowy effect which is so favourable to architectural grandeur.

Being a parochial church, this building had no baptistery attached to it; but there is one at Asti (Woodcut No. 737) so similar in style and age, that its plan and section, if examined with those of San Antonio, will give a very complete idea of Lombard architecture in the beginning of the 11th century, when it had completely shaken off the Roman influence, but had not yet begun to combine the newly invented forms with that grace and beauty which mark its more finished examples. One peculiarity of this building is the gloom that reigns within, there being absolutely no windows in the dome, and those in the aisles are so small, that even in Italy the interior must always have been in comparative darkness.

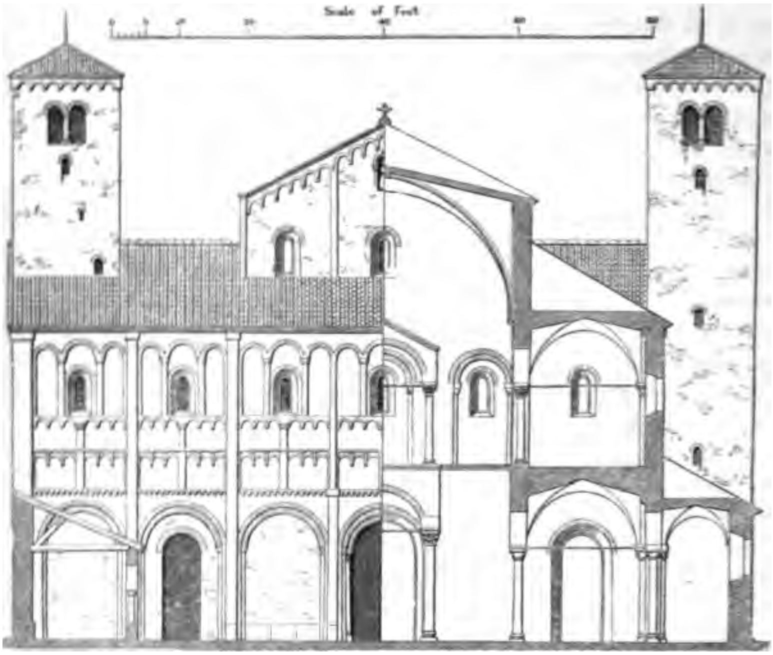
The cathedral of Novara, which in its present state is one of the most important buildings of the 11th century in the North of Italy, shows the style still further advanced. The coupling and grouping of piers are here fully understood, and the divisions of the chapels which form the outer aisle are, in fact, concealed buttresses. The Italians were never able to divest themselves of their partiality for flat walls, and never liked the bold external projections so universally admired on the other side of the Alps. They therefore gladly had recourse to this expedient to conceal them; and when this was not available they used metallic ties to resist the thrust of the arches—an expedient which is found even in this example. As will be seen from the annexed plan, the atrium connecting the basilica with the baptistery is retained, which seems to have been an arrangement almost universal in those early times. The half section, half elevation of the front (Woodcut No. 739) shows very distinctly how far the invention of the new style had then gone; for except some Corinthian pillars, borrowed from an older edifice, no trace of Romanesque architecture is to be found in it. The design of the façade explains what it was that suggested to the Pisan architects the form to which they adapted their Romanesque details. In both styles the arcade was the original model of the whole system of ornamentation. In this case it is used first as a discharging arch, then as a mere repetition of a useful member, and lastly without pillars, as



738. Plan of the Cathedral at Novara. Scale 100 ft. to 1 in.

a mere ornamental string-course, which afterwards became the most favourite ornament, not only in Italy, but throughout all Germany.

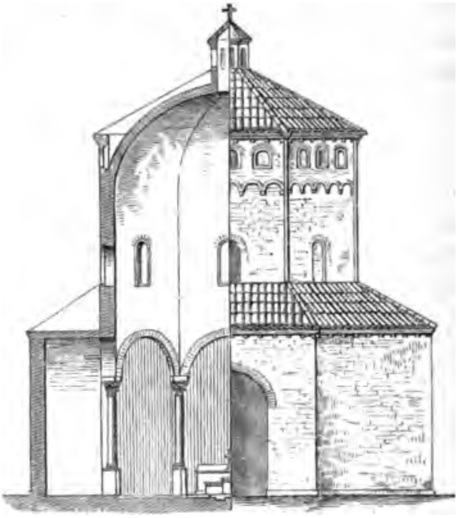
Interesting as such an example is to the architectural antiquary who is tracing back and trying to understand the forms of a new style, it would be difficult to conceive anything much uglier and less artistic than such a façade as this of Novara or that of San Antonio, last quoted. Their sole merit is their history and their expression of rude energy, so characteristic of the people who erected them.



739. Elevation and Section of the Façade of the Cathedral at Novara. (From Osten.)

The baptistery is older than the cathedral, probably as old as the age of Charlemagne; and if it had any features which could properly be called architectural, it ought perhaps to rank among Romanesque buildings. In plan it certainly belongs to that style. Its chief point of interest, however, is that it contains the germ of those external galleries under the roof which form not only one of the most common but also one of the most beautiful features of the class of buildings we are now considering.

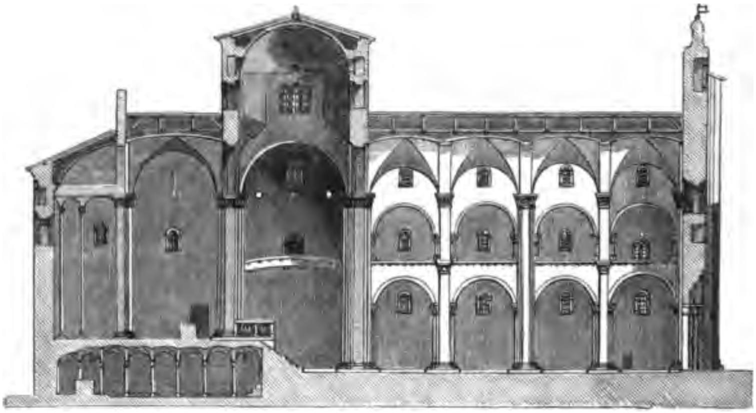
From the elevation (Woodcut No. 740) it will easily be seen what was the motive and use of this arrangement, the first trace of which dates perhaps as far back as the baptistery at Nocera (Woodcut No. 300); for wherever a wooden roof was placed over a circular vault, it is evident that the external walls must be carried up higher than the springing of the arch. But it was by no means necessary that this additional wall should be so solid as that below it, and it was necessary to introduce light and air into the space between the stone and the wooden roofs. Add to this the incongruity of effect in placing a light tiled wooden roof on a massive solid wall, and it will be evident that not only did the exigencies of the building, but the true principles of taste, demand that this part should be made as light as possible. Such openings as these found in the baptistery at Novara suggested an expedient which provided for these objects. This was afterwards carried to a much greater extent. At first, however, it seems only to have been used under the roofs of the domes with which the Italians almost universally crowned the intersections of naves and transepts, and round the semidomes of the apses; but so enamoured did they afterwards become of this feature, that it is frequently carried along the sides of the churches, under the roof of the nave and of the aisles, and also—where it is of more questionable taste—under the sloping eaves of the roof of the principal façade.



710. Half Section, half Elevation, of the Baptistery at Novara. (From Osten.) No scale.

There is nothing in the style of which we are now speaking either so common or so beautiful as these galleries, the arcades of which have all the shadow given by a cornice without its inconvenient projection, while the little shafts with their elegant capitals and light archivolts have a sparkle and brilliancy which no cornice ever possessed. Indeed, so beautiful are they, that we are not surprised to find them universally adopted; and their discontinuance on the introduction of the pointed style was one of the greatest losses sustained by architectural art in those days. It is true they would have been quite incompatible with the thin walls and light piers of pointed architecture; but it may be safely asserted that no feature which those new styles introduced was equally beautiful with these galleries which they superseded.

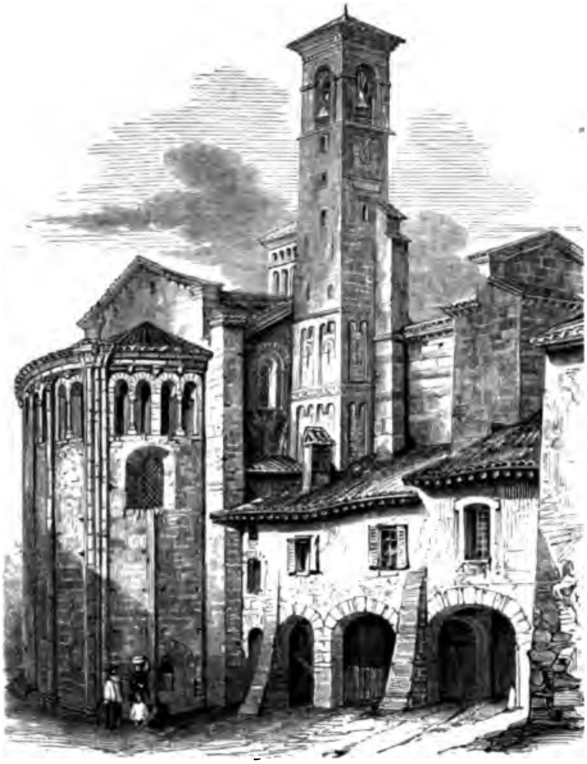
The church of San Michele at Pavia, which took its present form either at the end of the 11th or beginning of the 12th century, is one of the most interesting of this age, and presents in itself all the characteristics of a perfect round-arched Gothic church. Indeed there is hardly any feature worth mentioning which was invented after this date except the pointed arch—a very doubtful improvement—and window tracery, which the Italians never cordially adopted or understood. The section (Woodcut No. 741) shows the general arrangement of San Michele, from which it will be seen that well-marked vaulting-shafts spring from floor to roof, that the pier arches in the wall are perfectly distinct and well understood, and that the angles of the piers are softened and ornamented by shafts and other subordinate members. Altogether, it is evident that that subdivision of labour (if the expression may be used) which was so characteristic of the true Gothic style had here been perfectly understood, every part having its own function and telling its own story. To complete the style only required a little experience to decide on the best and most agreeable proportions in size and solidity. In a century from the date of this church the required progress had been made; a century later it had been carried too far, and the artistic value of the style was lost in mere masonic excellence. San Michele and the other churches of its age fail principally from over-heaviness of parts and a certain clumsiness of construction, which, though not without its value as an expression of power, wants the refinement necessary for a true work of art. Externally, one of the most pleasing features of this church is the apse with its circular gallery. In Italian churches the gallery is usually a simple range of similar arcades; here, however, it is broken into three great divisions by coupled shafts springing from the ground, and these again subdivided by single shafts running in like manner through the whole height of the apse. The gallery thus not only becomes a part of the whole design, instead of looking like a possible afterthought, but an agreeable variety



741. Section of San Michele, Pavia. (From Agincourt.) No scale.

is also given, which adds not a little to the pleasing effect of the building.

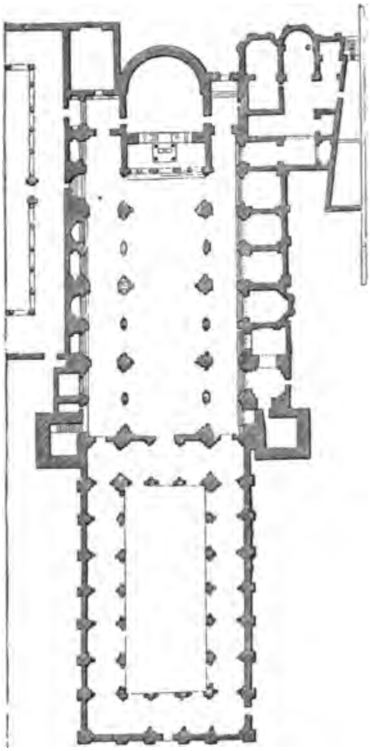
There are at least two other churches in Pavia which, though altered in many parts, retain their apsidal arrangements tolerably perfect. One of these, that of San Teodoro, may be somewhar older than the San Michele, and has its gallery divided into triplets of arcades by bold flat buttresses springing from the ground. The other, San Pietro in Cielo d'Oro, is considerably more modern, the arcade being omitted round the apse, though introduced in the central dome. It has besides two subordinate apses of graceful design, but inferior to the older examples.



742. View of the Apse of San Michele, Pavia. (From Du Somerard, 'Les Arts au Moyen-Age.')

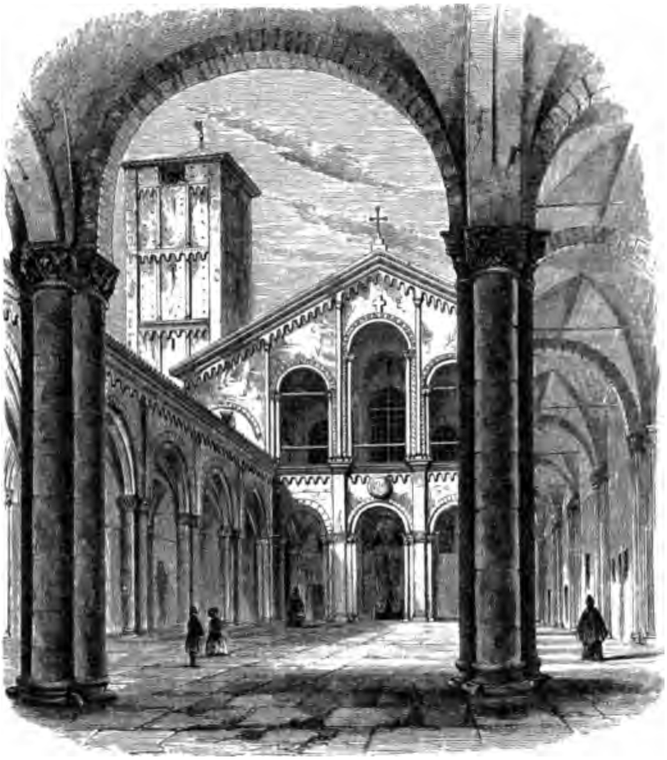
Though Milan must have been rich in churches of this age, the only one now remaining tolerably entire is San Ambrogio, which is so interesting as almost to make amends for its singularity. Historical evidence shows that a church existed here from a very early age. It was rebuilt in the 9th century by Bishop Anspertus, aided by the munificence of King Louis the Pious; but except the apse and the older of the two towers – that called "the canons'"—nothing remains of even that church, all the rest having been rebuilt in the 12th century. The vaulting of the church, which is extremely clumsy, and clumsily fitted to the substructure, is the work of the 13th century.

The disposition of the building will be understood from the annexed plan, which shows both the atrium and the church. The former is virtually the nave; in other words, had the church been erected on the colder and stormier side of the Alps, a clerestory would have been added to the atrium, and it would have been roofed over; and then the plan would have been nearly identical with that of a Northern cathedral. If, besides this, there had been a baptistery at the western entrance, as at Novara, Piacenza, or Torcello, we should have had a building with two apses — a complete German cathedral. As it is, the atrium (Woodcut No. 744) is a highly pleasing adjunct to the façade, removing the church back from the noisy world outside, and by its quiet seclusion tending to produce that devotional feeling so suitable to the entrance of a place of worship. The façade of the building itself, though, like the atrium, only in brick, is one of the best designs of its age, the upper loggia, or open gallery of five bold but unequal arches, producing more shadow than the façade at Pisa, without the multitude of small parts there crowded together, and with far more architectural propriety and grace. As seen from the atrium, with its two towers, one on either flank, it forms a composition scarcely surpassed by any other in this style.


743. Plan of San Ambrogio, Milan. (From Ferrario.) Scale 100 ft. to 1 in.

Owing to the bad arrangement of the vaulting, the internal architecture of the church is hardly worthy of its exterior; but it is a perfect museum of ecclesiological antiquities of the best class. The silver altar of Angilbertus (A.D. 835) is unrivalled either for richness or beauty of design by anything of the kind known to exist elsewhere, and the *baldacchino* that surmounts it is also of singular beauty: so are some of its old tombs, of the earliest Christian workmanship. Its mosaics, its pulpit, and the bronze doors, not to mention the brazen serpent—said to be the very one erected by Moses in the wilderness —and innumerable other relics, make this church one of the most interesting of Italy, if not indeed of all Europe.

Generally speaking, the most beautiful part of a Lombard church is its eastern end. The apse with its gallery, the transepts, and above all the dome that almost invariably surmounts their intersection with the choir, constitute a group which always has a pleasing effect, and is very often highly artistic and beautiful. The sides of the nave, too, are often well designed and appropriate; but, with scarcely a single exception, the west end, or entrance front, is comparatively mean. The building seems to be cut off at a certain length without any appropriate finish, or anything to balance the bold projections towards the east. The French cathedrals, on the contrary, while they entirely escape this defect by means of their bold western towers,



744. Atrium of San Ambrogio, Milan. (From Ferrario.[1])

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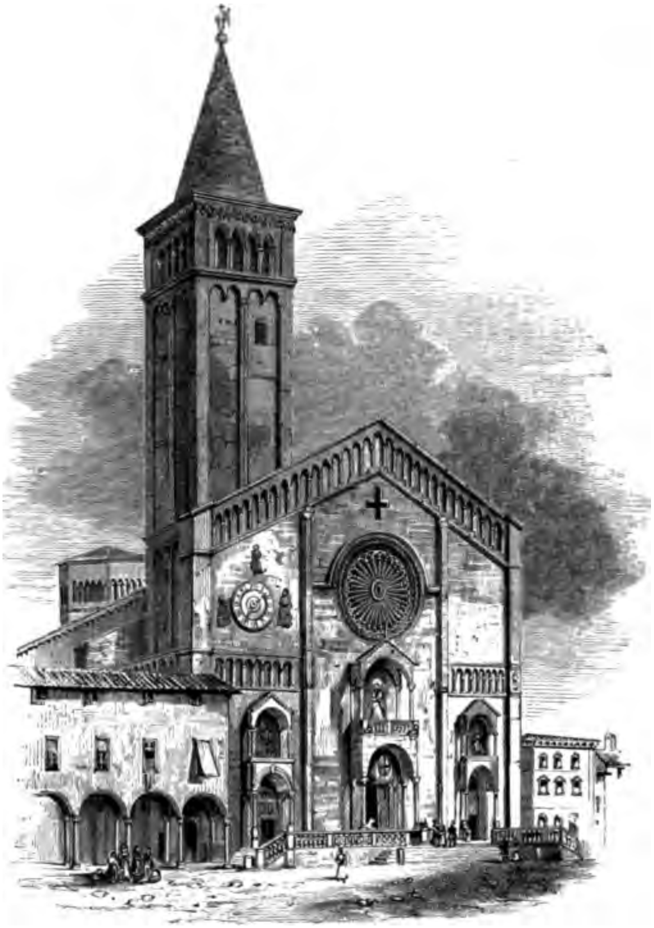
[1] Ferrario, 'Monumenti Sacri e Profani dell' I. R. Basilica di S. Ambrogio.' Milan, 1824.

are generally deficient in the eastern parts, and almost always lack the central dome or tower. The English Gothic architects alone understood the proper combination of the three parts. The Italians, when they introduced a tower, almost always used it as a detached object, and not as a part of the design of the church. In consequence



745. Façade of the Cathedral at Piacenza. (From Chapuy, 'Moyen-Age Monumental.')

of this the façades of their churches are frequently the least happy parts of the composition, notwithstanding the pains and amount of ornament lavished upon them.

The elevation of the cathedral at Piacenza is a fair illustration of the general mode of treating the western front of the building, not only in the 11th and 12th centuries, but afterwards, when a church had a façade at all—for the Italians seem to have been seldom able to satisfy themselves with this part of their designs, and a great many of their most important churches have, in consequence, not even now been completed in this respect.

Instead of recessing their doors, as was the practice on this side of the Alps, the Italians added projecting porches, often of considerable depth, and supported by two or more slight columns, generally resting on the backs of symbolical animals. No part of these porches, as an architectural arrangement, can be deemed worthy of any commendation; for in the first place, a column planted on an animal's back is an anomaly and an absurdity, and the extreme tenuity of the pillars, as compared with the mass they support, is so glaring that even its universality fails in reconciling the eye to the disproportion. In the present instance the porch is two storeys in height, the upper being a niche for sculpture. Its almost exact resemblance to the entrance porch below is therefore a defect. Above there is generally a gallery, sometimes only in the centre; sometimes, as in this instance, at the sides, though often carried quite across; and in the centre above this there is almost invariably a circular window, the tracery of which is frequently not only elaborately but beautifully ornamented with foliage and various sculptural devices.

Above this there is generally one of those open galleries mentioned before, following the slope of the roof, though frequently, as in this instance, this is replaced by a mere belt of semicircular arches, suggesting an arcade, but in reality only an ornament.

VERONA.

Almost every important city in Lombardy shows local peculiarities in its style, arising from some distinction of race or tradition. The greater number of these must necessarily be passed over in a work like the present, but some are so marked as to demand particular mention. Among these that of Verona seems the most marked and interesting. This Roman city became the favourite capital of Theodoric the Goth—Dietrich of Berne, as the old Germans called him—and was by him adorned with many noble buildings which have either perished or been overlooked. There is a passage in the writings of his friend Cassiodorus which has hitherto been a stumbling-block to commentators, but seems to find an explanation in the buildings here, and to point to the origin of a mode of decoration worth remarking upon. In talking of the architecture of his day he speaks of "the reed-like tenuity of the columns making it appear as if lofty masses of building were supported on upright spears, which in regard to substance look like hollow tubes."[1] It might be supposed that this referred exclusively to the metal architecture of the use of which we find traces in the paintings at Pompeii and elsewhere.[1] But the context hardly bears this out, and he is probably alluding to a stone or marble architecture, which in the decline of true art had aspired to a certain extent to imitate the lightness which the metallic form had rendered a favourite.

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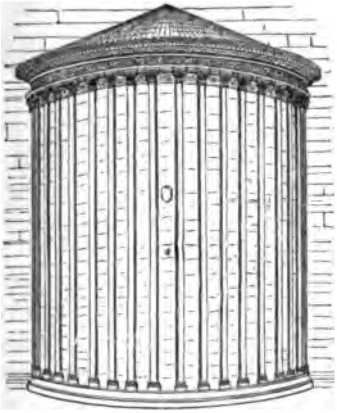
[1] "Quid dicamus columnarum junceam proceritatem? Moles illas sublimissimas quasi quibusdam erectis hastilibus contineri substantiæ qualitate concavis


746. Apse of the Cathedral, Verona. (From Hope's 'History of Architecture.')

To return to Verona:—The apse of the cathedral seems to have belonged to an older edifice than that to which it is now attached, as was often the case, that being the most solid as well as the most sacred part of the building. As seen in the woodcut (No. 746) it is ornamented with pilasters, classical in design, but more attenuated than any found elsewhere; so that I cannot but believe that this is either one of the identical buildings to which Cassiodorus refers, or at least an early copy from one of them.

At a far later age, in the 12th century, the beautiful church of San Zenone shows traces of the same style of decoration (Woodcut No. 747), pilasters being used here almost as slight as those at the cathedral, but so elegant and so gracefully applied as to form one of the most beautiful decorations of the style. Once introduced, it was of course repeated in other buildings, though seldom carried to so great an extent or employed so gracefully as in this instance. Indeed, whether taken internally or externally, San Zenone may be regarded as one of the most pleasing and perfect examples of the style to be found in the North of Italy.

The cathedral at Modena is another good example, though not possessing any features of much novelty or deserving special mention. That of Parma is also important, though hardly so pleasing. Indeed, scarcely any city in the Valley of the Po is without some more or less perfect churches of this date, none showing any important peculiarities that have not been exemplified above, unless perhaps it is the apse of the church of San Donato on the Murano near Venice, which is

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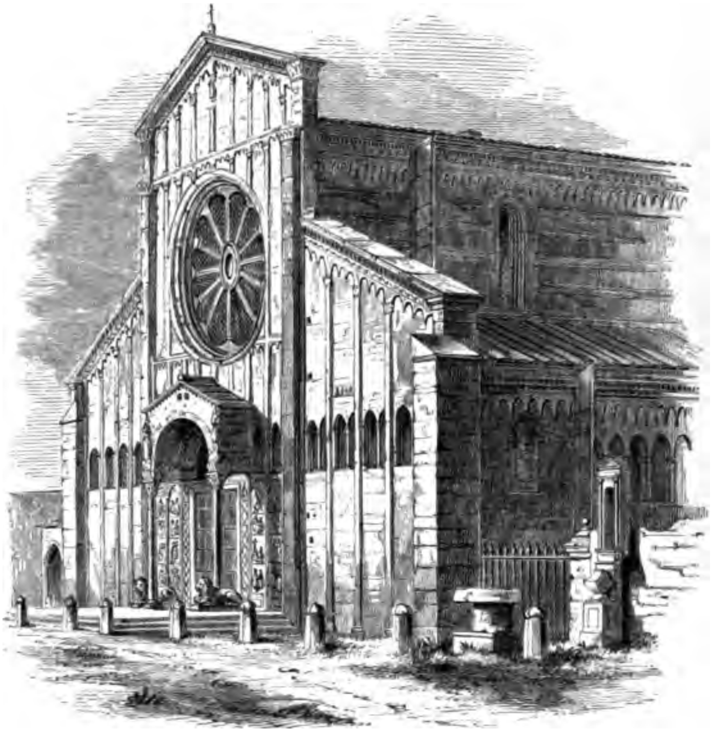
canalibus excavatas vel magis ipsas æstimes esse transfusas. Ceris judices factum quod metallis durissimis videas expolitum. Marmorum juncturas venas dicas esse genitales, ubi dum falluntur oculi laus probatur crevisse miraculis." In the above, *metallum* does not seem to mean metal as we now use the word, but any hard substance dug out of the ground. —Cassiodorus variorum, lib. vii. ch. 15.

[1] See vol. i. p. 372.

decorated with a richness of mosaic to which the purer Gothic style never attained, and which entitles this church to rank rather with the Byzantine than with the Gothic buildings of which we are treating, or a style so curiously exceptional as to make one of the most interesting churches, historically, to be found in the North of Italy.

Recent discoveries in Syria[1] have proved almost beyond a doubt that the carved slabs with which it is adorned externally were



747. Façade of San Zenone, Verona. (From Chapuy.)

borrowed from some desecrated building on the coast of Syria—destroyed probably by the Moslems—and brought to Venice probably at the time when the church acquired the remains of San Donato, in the beginning of the 12th century. Whether brought then or at an earlier period, they belong to the age of Justinian, certainly came from the East, and, mixed up with Italian details of the period, make up an exterior as picturesque as it is interesting to the student of the history of art in those days.

It is extremely difficult to draw a line between the pointed and round-arched Gothic styles in Italy. The former was so evidently a foreign importation, so unwillingly received and so little understood, that it made its way but slowly. Even, for instance, in the church at Vercelli, which is usually quoted as the earliest example of the pointed style in Italy (built 1219–1222), there is not a pointed arch nor a trace of one on the exterior. All the windows and openings are round-headed, and, except the pier-arches and vaults, nothing pointed appears anywhere. Even at a later date than this the round arch, especially as a decorative form, is frequently placed above the pointed one, and always used in preference to it. Instead, therefore, of attempting to draw a line where none exists in reality, it will be better now to pass on from this part of the subject, and to take up the older style at a point from which we can best trace the formation of the new. The latter does not essentially differ from the former, except in the introduction of the French form of the pointed arch and its accompaniments. It remains only to say a few words on the peculiarities which the round form of churches took in the hands of the early Lombard architects, as well as on the campanile, which forms so striking a feature in the cities of Northern Italy.

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[1] 'The Land of Moab,' by Dr. Tristram (Murray, 1873), pp. 376 *et seqq.*

CIRCULAR CHURCHES.

In the earliest times of Christian architecture, as we have already seen, the circular form of church was at least as frequent as that derived from the Roman basilica. In process of time the latter was found to be much better adapted to the extended requirements of Christianity. Hence in the 11th and 12th centuries, when so many of the early churches were rebuilt and enlarged, most of the old circular buildings disappeared. Enough, however, remain to enable us to trace, though imperfectly, what their arrangements were.

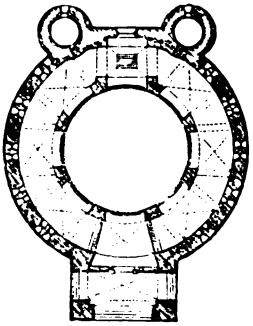
Among those which have been illustrated, perhaps the most interesting is that known as the church of San Stefano at Bologna, or rather the circular centre of that congeries of seven churches usually known by that name.

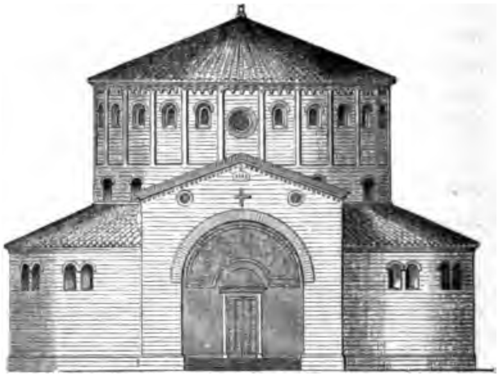
It is one of those numerous churches of which it is impossible to predicate whether it was originally a baptismal or a sepulchral edifice. In old times it bore both names, and may have had both destinations, but latterly, at all events, the question has been settled by the compromise usually adopted in such cases, of dedicating it to the first martyr, to whom a sepulchral form of building is especially appropriate.

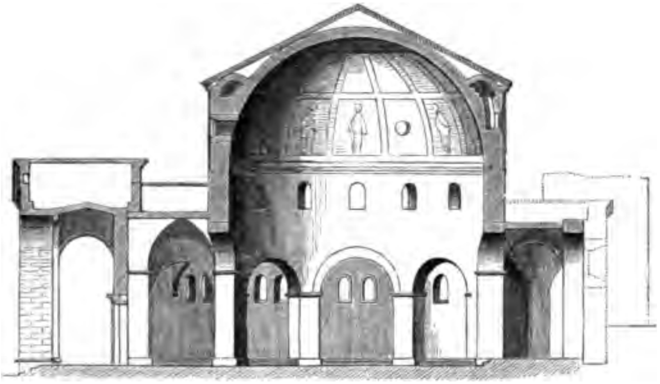
Notwithstanding a considerable amount of ancient remains mixed up in the details, no part of the present church seems older than the Carlovingian era; while, on the other hand, its extreme irregularity and clumsiness of construction point to a period before the

11th century. Its general form is that of an extremely irregular octagon, about 60 ft. in diameter, in the centre of which stands a circlet of columns, some coupled, some single, supporting a semicircular dome. The circumscribing aisle is covered with the usual intersecting ribbed vault of the 10th century, but the whole is so rude as scarcely to deserve mention except for its antiquity.

At Brescia there are two circular churches: one, the Duomo Vecchio, may be anterior even to the Carlovingian era—Hübsch thinks it belongs to the 7th century. Whatever its date, it is one of the best preserved and most interesting churches of its class in the North of Italy. As will be seen from the plan, it is a large church, 125 ft. across over all, and is covered by a dome 65 ft. diameter internally, supported by eight piers of very plain design. The mode in which light is introduced into the central compartment illustrates the various tentative expedients by which the architects in that age


748. Plan of the Duomo, Brescia. (From Hübsch.) Scale 100 ft. to 1 in.


749. Elevation of Duomo at Brescia. (From Hübsch.) Scale 50 ft. to 1 in.

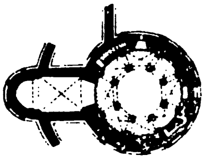

750. Section of Duomo at Brescia. (From Hübsch.) Scale 50 feet to 1 inch.

attempted to accomplish their object. First, there is a range of small windows in the drum below the springing of the dome. In the dome itself there are four circular holes, and as if the architect felt that he was doing something unusual and inartistic, he managed externally to confuse these with the rudiments of the roof-gallery. This last feature is managed in even a more rudimentary fashion than at Novara (Woodcut No. 739), and is evidently intended to look, externally, as if it lighted the interior of the church.

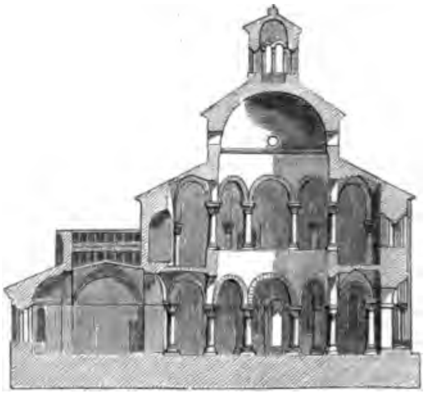
It is not clear whether originally it had or was intended to have an apse between its two round towers—the foundations of which can still be traced. Most probably it had. What renders this church of peculiar interest now is that its ordonnance had probably even more influence on the design of the churches at Aix-la-Chapelle and elsewhere in Germany than San Vitale at Ravenna, which is usually considered the prototype of all the circular churches north of the Alps.

The other circular church at Brescia is that of Sta. Julia, which is certainly more modern than the Duomo, and, as it at present stands, cannot be considered older than the 12th century. In its upper part it assumes an octagonal form, and altogether tends much more towards the Gothic forms than its rival.

Turning from these we find the round-arched Gothic style completely developed in the church of San Tomaso in Limine, near Bergamo. From the annexed plan it will be seen that the circular part is the nave or entrance, as in Germany and England, in contradistinction to the French mode of arrangement, where the circular part is always the sanctum, the rectangular the nave or less holy place.



751. San Tomaso in Limine. Scale 100 ft. to 1 in.



752. San Tomaso. (From Isabelle, 'Edifices Circulaires.') Scale 50 ft. to 1 in.

The general plan of this example is circular. It is not more than 30 ft. across internally. In the centre stand eight pillars, supporting a vaulted gallery, which forms a triforium or upper storey, and, with the dome and its little cupola, raise the whole height to about 50 ft. A small choir with a semicircular niche projects eastward.

The dimensions of the building are so small, that it hardly deserves notice, except as a perfect example of the style of the 11th or 12th century in Lombardy, and for a certain propriety and elegance of design, in which it is not surpassed, internally at least, by any building of its age. It is to be regretted that the idea was never carried out (at any rate no example remains) on such a scale as to enable us to judge of the effect of such a domical arrangement as is here attempted. The great defect of all one-storeyed domes is their lowness, both internally and more especially externally. This method of building a dome in two storeys would seem calculated to obviate the objection; but though common in small sepulchral chambers, it has never been tried on a scale sufficiently large to enable us to judge of its real effect. After this period the circular shape was so completely superseded by the rectangular, that no further improvement took place in it.

Towers.

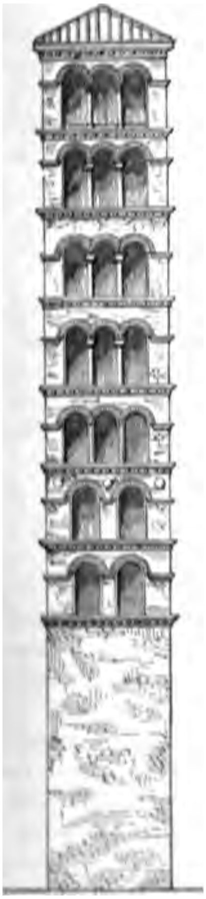
There is perhaps no question of early Christian archæology involved in so much obscurity as that of the introduction and early use of towers. The great monumental pillars of the Romans—as, for instance, those of Trajan and Antoninus—were practically towers; and latterly their tombs began to assume an aspiring character like that at St. Remi (Woodcut No. 230), or those at Palmyra and elsewhere in the East, which show a marked tendency in that direction. But none of these can be looked upon as an undoubted prototype of the towers attached to the churches of the Christians.

At Ravenna, as early as the age of Justinian, we find circular towers attached to St. Apollinare in Classe (Woodcut No. 289), and in the other churches of that place they seem even then to have been considered necessary adjuncts. At the same time it is by no means clear that they were erected as bell-towers; indeed the evidence is tolerably clear that bells were not used in Christian churches till the time of Pope Adrian I., some two centuries later. What, then, were they? There is, I think, no trace of their being sepulchral monuments, or that they were designed or used as tombs; and unless they were, like the *sthambas* of the Buddhists, pillars of victory, or towers erected to mark sacred or remarkable spots, it is difficult to say what they were, or where we are to look for an analogy.

Be this as it may, the oldest circular towers with which we are acquainted are those of Ravenna; while the last of the series is the famous leaning one at Pisa, commenced in the year 1174. The gradations between these two extremes must have been the same that marked the changes in the architecture of the churches to which they are attached; but the links are more completely wanting in the case of the towers than in that of the churches.

The tower of St. Apollinare in Classe, above referred to, the most perfect of those of Ravenna, is a simple brick tower (see Woodcut No. 289), nine storeys in height, the lower windows being narrow single openings; above there are two, and the three upper storeys are adorned with four windows of three lights each.

In Rome, as far as we know, the first tower attached to a church was that built by Pope Adrian I. in front of the atrium of St. Peter's; but they soon became common, and we now find them attached to the churches of S. Lorenzo without the walls, S. Croce in Gerusalemme, SS. Giovanni e Paolo, S. Clemente, S. Giorgio in Velabro, and others. All these are square in plan and extremely similar in design, no improvement and scarcely any change having taken place between the first and the last, as if the form were an old and established one when we find it first adopted. That attached to Sta. Maria in Cosmedin (Woodcut No. 753) is perhaps one of the best and most complete. Its dimensions are small, its breadth being little more than 15 ft., and its height only 110; but notwithstanding this there is great dignity in the design, and, in a city where buildings are not generally tall, its height is sufficient to give it prominence without overpowering other objects,—a characteristic which renders these Roman towers not only beautiful structures in themselves, but appropriate ornaments to the buildings to which they are attached.


753. Tower of Sta. Maria in Cosmedin. (From Gutensohn and Knapp.)

The chief interest of these towers is derived from the numerous progeny to which they gave birth: for though there is scarcely an instance of a square Romanesque tower beyond the walls of Rome during the period in which this style flourished, the form was seized upon with avidity by the Gothic architects in all the countries of Europe; and whether as a detached campanile (as in Italy), or as an integral part of the building (as we soon find it employed on this side of the Alps), it forms the most prominent, and perhaps also the most beautiful, feature in the aspiring architecture of the Middle Ages.

There is certainly no architectural feature which the Gothic architects can so justly call their own as the towers and spires which in the Middle Ages were so favourite, so indispensable a part of their churches and other edifices, becoming in fact as necessary parts of the external design as the vaults were of the internal decoration of the building.

It is true, as before remarked, that we neither know where they were first invented, nor even where they were first applied to Christian churches—those of Rome and Ravenna being evidently not the earliest examples; nor have they any features which betray their origin—at least none have yet been pointed out, though it is not impossible that a closer examination would bring some such to light. They certainly are as little classical, in form or details, as anything that can well be conceived: nor, consequently, can the very name of Romanesque be considered entirely appropriate, though we may be compelled to use it as marking the age and locality in which they occur.

Those of which we have already spoken are all church-towers —*campaniles* or bell-towers attached to churches. But this exclusive distinction by no means applies to the Gothic towers. The tower of St. Mark at Venice, for instance, and the Toraccio at Cremona, are evidently civic monuments, like the belfries of the Low Countries —symbols of communal power wholly distinct from the church, their proximity to which seems only to arise from the fact of all the principal buildings being grouped together. This is certainly the case with a large class of very ugly buildings in Italy, such as those attached to the town-halls of Florence and Siena, or the famous Asinelli and Garisenda towers at Bologna. They are merely tall square brick towers, with a machicolated balcony at the top, but possessing no more architectural design than the chimney of a cotton factory. Originally, when lower, they may have been towers of defence, but afterwards became mere symbols of power.

A third class, and by far the most numerous, of these buildings are undoubtedly ecclesiastical erections; they are either actually attached to the churches, or so placed with regard to them as to leave no doubt on the matter. There is not, however, I believe, in all Italy a single example of a tower or towers forming, as on this side of the Alps, an integral part of the design.

Sometimes they stand detached, but more generally are connected with some angle of the building, the favourite position being the western angle of the southern transept. Occasionally we find one tower placed at the angle of the façade, but this is seldom the case when the tower and the church are of the same age. It is so in the cathedral at Lucca, and San Ambrogio at Milan; in the latter of which a second tower has been added more recently to balance the older one. It does also happen as in the instance of Novara, before quoted (Woodcut No. 739), that two towers are actually parts of the original design; this, however, is certainly the exception, not the rule.

In design the Italian campaniles differ very considerably from those on this side of the Alps. They never have projecting buttresses, nor assume that pyramidal form which is so essential and so beautiful a feature in the Northern examples. In plan the campanile is always square, and carried up without break or offset to two-thirds at least of its intended height. This, which is virtually the whole design (for the spire seems an idea borrowed from the North), is generally solid to a considerable height, or with only such openings as serve to admit light to the stairs or inclined planes. Above the solid part one round-headed window is introduced in each face, and in the next storey two; in the one above this three, then four, and lastly five, the lights being merely separated by slight piers, so that the upper storey is virtually an open loggia (see Woodcut No. 761). There is no doubt great beauty and propriety of design in this arrangement; in point of taste it is unobjectionable, but it wants the vigour and variety of the Northern tower.

So far as we can judge from drawings and such ancient examples as remain, the original termination was a simple cone in the centre, with a smaller one at each of the angles.

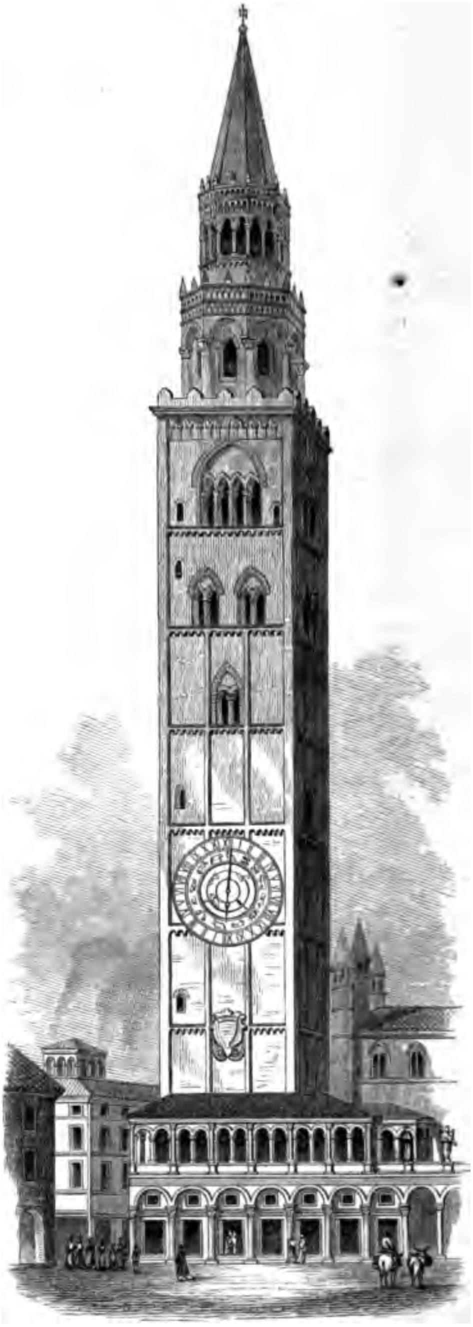
At Verona an octagonal lantern is added, and at Modena and Cremona the octagon is crowned by a lofty spire, but these hardly come within the limits of the epoch of which we are now treating. So greatly did the Italians prefer the round arch, that even in their imitation of the Northern styles they used the pointed shape only when compelled—a circumstance which makes it extremely difficult, particularly in the towers, to draw the line between the two styles; for though pointed arches were no doubt introduced in the 13th and 14th centuries, the circular-headed shape continued to be employed from the age of the Romanesque to that of the Renaissance.

One of the oldest and certainly the most celebrated of the Gothic towers of Italy, is that of St. Mark's at Venice, commenced in the year 902; it took the infant republic three centuries to raise it 180 ft., to the point at which the square basement terminates. On this there must originally have been an open loggia of some sort, no doubt with a conical roof. The present superstructure was added in the 16th century, but though the loggia is a very pleasing feature, it is overpowered by the solid mass that it surmounts, and by the extremely ugly square extinguisher that crowns the whole. Its locality and its associations have earned for it a great deal of undue laudation, but in point of design no campanile in Italy deserves it less. The base is a mere unornamented mass of brickwork, slightly fluted, and pierced unsymmetrically with small windows to light the inclined plane within. Its size, its height, and its apparent solidity [illegible] its only merits. These are no doubt important elements in that low class of architectural excellence of which the Egyptian pyramids are the type; but even in these elements this edifice must confess itself a pigmy, and inferior to even a second-class pyramid on the banks of the Nile, while it has none of the beauty of design and detail displayed by the Giralda of Seville, or even by other Italian towers in its own neighbourhood.

The campanile at Piacenza (Woodcut No. 745) is, perhaps, more like the original of St. Mark's than any other, and certainly displays as little beauty as any building of this sort can possess.

That of San Zenone at Verona is far more pleasing. It is, indeed, as beautiful both in proportion and details as any of its age, while it exemplifies at once the beauties and the defects of the style. Among the first is an elegant simplicity that always is pleasing, but this is accompanied by a leanness and poverty of effect, when compared with Northern examples, which must rank in the latter category.

The typical tower of its class is the Toraccio of Cremona. It is a monumental tower commenced in 1296 to commemorate a peace made between Cremona and the neighbouring states after a long and tedious contest for supremacy. It is not an ecclesiastical edifice, but partakes, therefore, like those of St. Mark, Venice, and of Modena, more of



751. Torracio at Cremona. (From Gally Knight.)

the character of a civic belfry than of a church tower, such as those previously mentioned. It is the highest and largest, and consequently, according to the usual acceptation of the term, the finest, of Italian towers. Its whole height is 396 ft., about two-thirds of which is a square ungainly mass, without either design or ornament of any importance. On this is placed an octagon and spire, which, though in themselves perhaps the best specimens of their class in Italy, have too little connexion either in design or dimensions with the tower on which they stand.

The celebrated tower of the Ghirlandina at Modena is, perhaps, one of the best to enable us to compare these Italian towers with the Cis-Alpine ones, since it possesses a well-proportioned spire, which is found in few of the others. From its date it belongs to the second division of the subject, having been commenced in the 13th and finished in the 14th century; but, as before remarked, there is no line of distinction between the round-arched and pointed-arched styles in Italy, and as this campanile seems to be wholly without any pointed forms, we may describe it here.

Its whole height is about 315 ft., of which less than 200 are taken up in the square part—which thus bears a less predominant proportion to the spire than any other Italian example. It is evidently meant to rival the famous German spires which had become such favourites in the age in which it was built; and although it avoids many of the errors into which the excessive love of decoration and of *tours de force* led the Germans, still the result is far from satisfactory. The change from the square to the octagon is abrupt and unpleasing, and the spire itself looks too thick for the octagon. Everywhere there is a want of those buttresses and pinnacles with which the Gothic architects knew so well how to prepare for a transition of form, and to satisfy the mind that the composition was not only artistically but mechanically correct. The Italians never comprehended the aspiring principle of the Gothic styles, and consequently, though they had far more elegance of taste and used better details, their works hardly satisfy the mind to a greater extent than a modern classical church or museum.

The same remarks apply to the towers of Siena, Lucca, Pistoja, and indeed to all in the North of Italy: all have some pleasing points, but none are entirely satisfactory. None have sufficient ornament, nor display enough design, to render them satisfactory in detail, nor have they sufficient mass to enable them to dispense with the evidence of thought, and to impress by the simple grandeur of their dimensions.

CHAPTER III.

POINTED ITALIAN GOTHIC.

CONTENTS.

Fresco paintings — Churches at Vercelli, Asti, Verona, and Lucca — Cathedral at Siena — Sta. Maria, Florence — Church at Chiaravalle — St. Petronio, Bologna — Cathedral at Milan — Certosa, near Pavia — Duomo at Ferrara — Churches at Toscanella.

CHRONOLOGY.

	DATES.		DATES.
Bologna independent	A.D. 1112	Martino delle Torre at Milan	A.D. 1260
Countess Matilda at Florence	1115	Visconti Lord of Milan	1277
Obizzo d'Este at Ferrara	1184	Taddeo de Pepoli at Bologna	1334
Enrico Dandolo takes Constantinople	1203	Conspiracy of Marino Faliero	1355
War between Genoa and Venice	1205	Gian Galeazzo Visconti, Duke of Milan	1395
Azzo d'Este at Ferrara	1208	Verona ceded to Venice	1409
Martino della Scala at Verona	1259	Cosmo de' Medici	1434

Before the commencement of the 13th century, the Italians had acquired such mastery over the details of their round-arched style, and had worked it into such originality and completeness, that it is surprising that they should so easily have abandoned it for that form of Pointed Gothic which they afterwards adopted. It is true the Italians never rose to the conception of such buildings as the great Rhenish cathedrals, like those of Spires and Worms, or the old churches at Cologne; nor did they perhaps even rival the quasi-classical grace and elegance of the Provençal churches; but at Verona, Modena, and indeed throughout the North of Italy, they had elaborated a complete round-arched style, all the details of which were not only appropriate and elegant, but seemed capable of indefinite development in the direction in which they were proceeding. They had also before their eyes the Romanesque style of Pisa and Lucca with all its elegance, and the example of Rome, where the architects steadily refused to acknowledge the pointed arch during the whole of the Mediæval period. Yet in the beginning of the 13th century—say 1220, when the cathedrals of Amiens, Salisbury, and Toledo were designed—Italy too was smitten with admiration for the pointed arch, and set to work to adapt it to her tastes and uses.

It would be difficult to account for this, were we not aware how deeply the feelings that gave rise to the Ghibelline faction were rooted in the Italian soil. In all the cities, except Rome, the cause of the Ghibellines was throughout the Middle Ages identified with that of freedom and local independence, in opposition to that of the Guelfs, which symbolised the supremacy of the Pope and the clerical party. Knowing how strenuously this was resisted, we naturally expect to find it expressed in the architecture of the country. Two, indeed, of the great churches of Italy, Assisi (1228) and Milan (1385), were erected by Germans in the German style of the day; but these are exceptional. The form which the pointed-arched style took on its introduction, was that of adaptation to the Italian style, in a manner which the Italians thought more consonant with beauty and convenience than that adopted north of the Alps. In this they were certainly mistaken. The elegance of the details employed by a refined and cultivated people, and based on classical traditions, goes far to redeem, in most instances, the defects of their designs; but they never grasped the true principles of Gothic art, and the fatal facility of the pointed arch led them more astray after mechanical clevernesses than even the Germans. Still, it is an original style, and, however imperfect, is well worthy of study.

Before proceeding to describe the style more in detail, it may be well to point out one of the principal causes which led to the more marked features of difference between the Gothic architecture of Italy and that of Germany and France. This was the distaste of the Italians for the employment of painted glass, or at least their want of appreciation of its beauties when combined with architecture.

An attempt was made in a previous chapter to explain how all-important painted glass was to the elaboration of the Gothic style. But for its introduction, the architecture of France would bear no resemblance to what it was, and is. In Italy, indeed, the people loved polychromy, but always of the opaque class. They delighted to cover the walls of their churches with frescoes and mosaics, to enrich their floors with the most gorgeous pavements, and to scatter golden stars over the blue ground of their vaults; but rarely, if ever, did they fill, or design to fill, their windows with painted glass. Perhaps the glare of an Italian sun may have tended to render its brilliancy intolerable; but more probably the absence of stained glass is owing to its incompatibility with fresco-painting, the effect of which would be entirely destroyed by the superior brightness of the transparent material. The Italians were not prepared to relinquish the old and favourite mode of decoration in which they so excelled. This adherence to the ancient method of ornamentation enabled them, in the 15th and 16th centuries, to surpass all the world in the art of painting, but it was fatal to the proper appreciation of the pointed style, and to its successful introduction into the land.

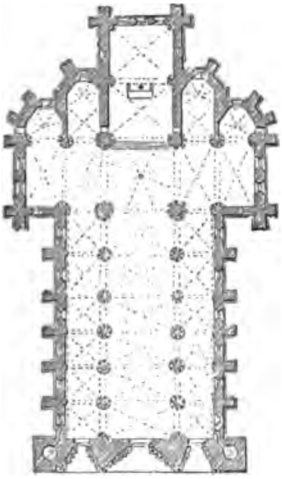
The first effect of this tendency was that the windows in Italian churches were small, and generally devoid of tracery, with all its beautiful accompaniments. The walls, too, being consequently solid, were sufficient, by their own weight, to abut the thrust of the arches: so that neither projecting or flying buttresses nor pinnacles were needed. The buildings were thus deprived externally of all the aspiring vertical lines so characteristic of true Gothic. The architects, to relieve the monotony arising from the want of these features, were forced to recur to the horizontal cornices of the classical times, and to cover their walls with a series of panelling, which, however beautiful in itself, is mere ornament—both unmeaning and inconsistent.

Internally, too, having no clerestory to make room for, and no constructive necessities to meet, they jumped to the conclusion that the best design is that which covers the greatest space with the least expenditure of materials, and the least encumbrance of the floor. With builders this is a golden rule, but with architects it is about the worst that can possibly be adopted. The Germans were not free from this fault, but the Italians carried it still further. If on four or five piers they could support the vault of a whole nave, they never dreamed of introducing more. A French architect, though superior in constructive skill, would probably have introduced eight or ten in the same space. An Italian aimed at carrying the vaults of the side-aisles to the same height as that of the nave, if he could. A Northern architect knew how to keep the two in their due proportion, whereby he obtained greater height and greater width in the same bulk, and an appearance of height and width greater still, by the contrast between the parts, at the same time that he gave his building a character of strength and stability perhaps even more valuable than that of size.

In the same manner the Northern architects, while they grouped their shafts together, kept them so distinct as to allow every one to bear its proportional part of the load, and perform its allotted task. The Italians never comprehended this principle, but merely stuck pilasters back to back, in imitation of the true architects, producing an unmeaning and ugly pier. The same incongruities occur in every part and every detail. It is a style copied without understanding, and executed without feeling. The elegance of the sculptured foliage and other details sometimes goes far to redeem these faults; for the Italians, though bad architects, were always beautiful carvers, and, as a Southern people, were free from the vulgarities sometimes apparent farther north, and never fell into the wild barbarisms which too often disfigure even the best buildings on this side of the Alps. Besides, when painting is joined to sculpture in churches, the architecture may come to occupy a subordinate position, and thus escape the censure it deserves. Unfortunately there are only two examples of any importance in this style that retain all their painted decorations—St.

Francis at Assisi, and the Certosa near Pavia. From this circumstance they are perhaps the most admired in Italy. In others the spaces left for colour are still plain and blank. We see the work of the architect unaided by the painting which was intended to set it off, and we cannot but condemn it as displaying at once bad taste and ignorance of the true Gothic feeling.

One of the earliest, or perhaps the very first Italian edifice into which the pointed arch was introduced, is the fine church of St. Andrea at Vercelli, commenced in the year 1219 by the Cardinal Guala Bicchieri, and finished in three years. This prelate, having been long legate in England, brought back with him an English architect called, it is said, Brigwithe, and entrusted him with the erection of this church in his native place.

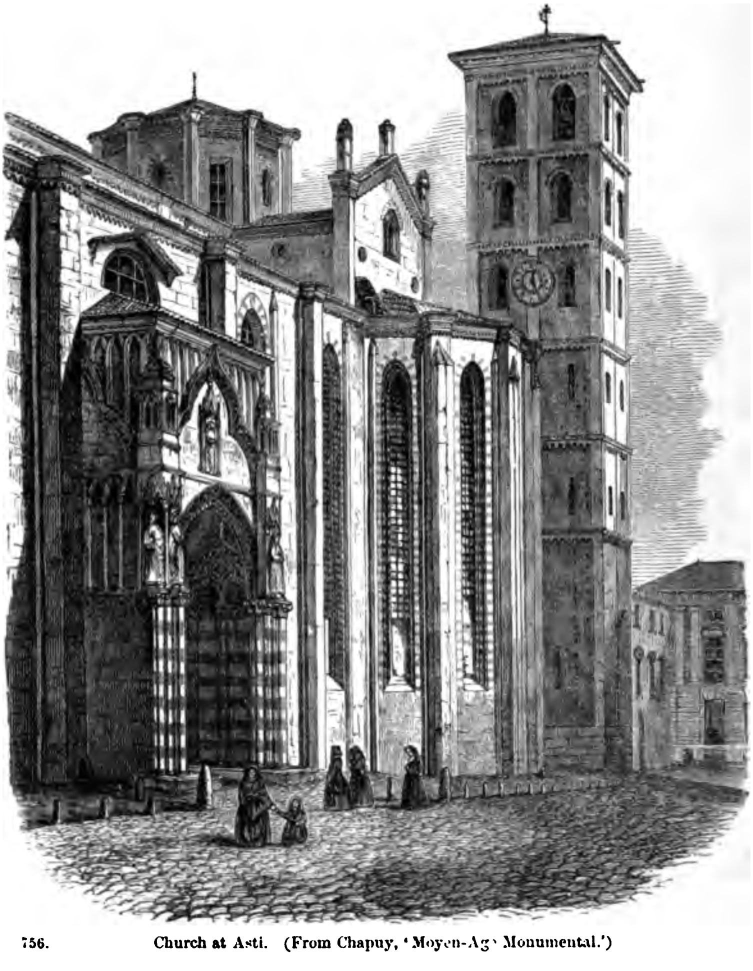


755. Plan of the Church at Vercelli. (From Osten's 'Baukunst in Lombardei.' Scale 100 ft. to 1 in.

In plan, it is certainly very like an English church, terminating squarely towards the east, and with side chapels to the transepts, arranged very much as we find them at Buildwas, Kirkstall, and other churches of this class and size, only that here they are polygonal, which was hardly ever the case in England. But with the plan all influences of the English architect seem to have ceased, and the structure is in purely Italian style. Externally the pointed arch nowhere appears, all the doors and windows being circular-headed; while internally it is confined to the pier-arches of the nave and the vaulting of the roof. The façade is flanked at its angles by two tall, slender, square towers; and the intersection of the nave and transept is covered by one of those elegant octagonal domes which the Italians knew so well how to use, and which is in fact the only original feature in their designs. The external form of this church is interesting, as displaying the germs of much that two centuries afterwards was so greatly expanded by a German architect in the design of Milan cathedral.

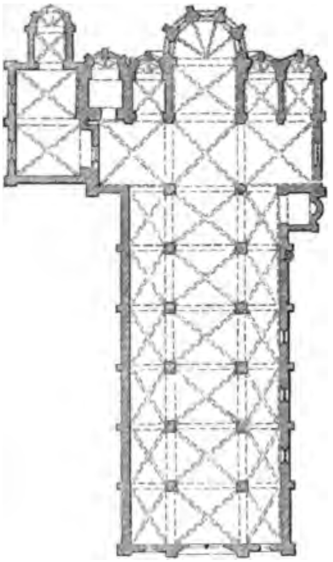
A few years later, in 1229, a church was commenced at Asti, the tower of which was finished in 1266. This allowed time for a more complete development of the pointed style, which here prevails not only internally, but externally. Tall lancet windows appear in the flanks, and even the doorways assume that form, in their canopies, if not in their openings. The porch (Woodcut No. 756) is a later addition, and a characteristic specimen of the style during the 14th century. This church is also one of the earliest examples in which those elegant terra-cotta cornices of small intersecting arches seem to have been brought to perfection.

The most remarkable church of this age is that of St. Francis at Assisi, commenced in 1228, and finished, in all essentials at least, in 1253. It is said to have been built by a German named Jacob, or Jacopo. Certainly no French or English architect would have designed a double church of this class, though, on the other hand, no Italian could have drawn details so purely Northern as those of the upper church. In the lower church there are hardly any mouldings to mark the style, but its character is certainly rather German than Italian. This church depends for its magnificence and character much more on

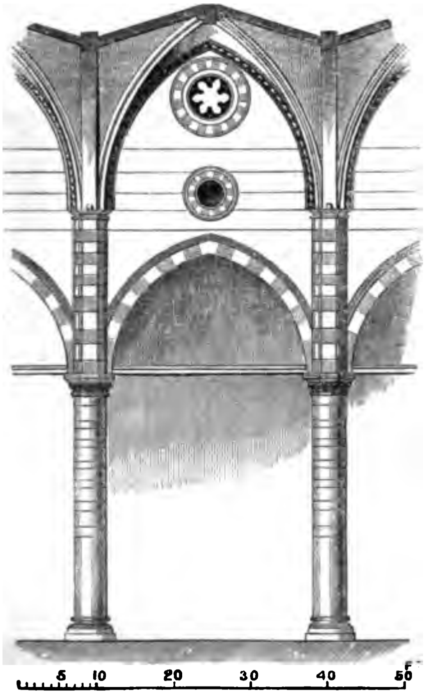


756. Church at Asti. (From Chapuy, 'Moyen-Age Monumental.')

painting than on architecture. In the first place it is small, the upper church being only 225 ft. long, by 36 in width; and though the lower one has side-aisles which extend the width to 100 ft., yet the upper church is only 60 ft. in height, and the lower about 30, so that it is far too small for much architectural magnificence. None of its details are equal to those of contemporary churches on this side of the Alps. The whole church is covered with fresco paintings in great variety and of the most beautiful character, which justly render it one of the most celebrated and admired of all Italy. On this side of the Alps, without its frescoes, it would hardly attract any attention. It is invaluable as an example of the extent to which polychromatic decoration may be profitably carried, and of the true mode of doing it; and also as an illustration of the extent to which the Italians allowed a foreign style and mode of ornamentation to be introduced into their country.

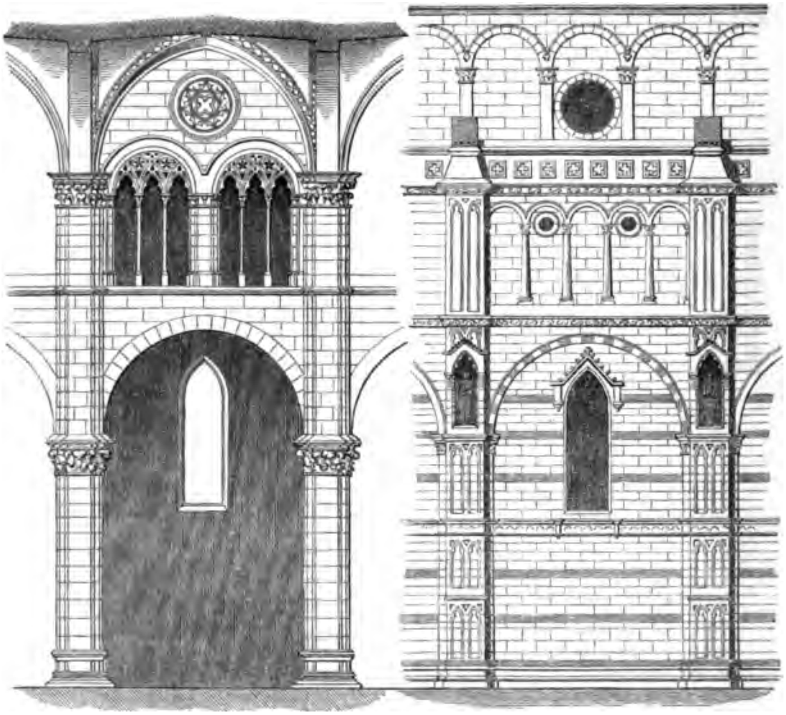


757. Plan of Sta. Anastasia, Verona. Scale 100 ft. to 1 in.



758. One Bay of Sta. Anastasia, Verona.

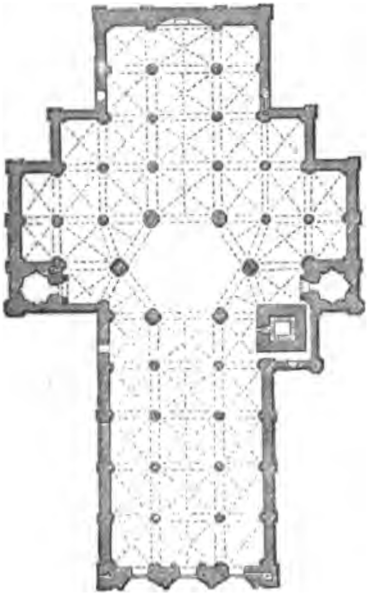
One of the purest and most perfect types of an Italian Gothic church is that of Sta. Anastasia at Verona, commenced apparently in 1260. It is not large, being only 285 ft. in length externally; but its arrangements are very complete, and very perfect if looked at from an Italian point of view. The square of the vault of the nave is the modulus, instead of that of the aisles, as in true Gothic churches; owing to which the pier-arches are further apart than a true artist would have placed them; there are also no buttresses externally, but only pilasters. The consequence of this is, that the arches have to be tied in with iron rods at the springing, which internally adds very much to the appearance of weakness, caused in the first instance by the wide spacing and general tenuity. These bad effects are aggravated by the absence of a string-course at the springing of the vault; and by the substitution of a circular hole for the triforium, and a hexafoiled opening of very insignificant dimensions for the glorious clerestory windows of Northern churches. Altogether, though we cannot help being pleased with the spaciousness and general elegance of design, it is impossible not to feel how very inferior it is to that of churches on this side the Alps.



759. One Bay, externally and internally, of the Church of San Martino, Lucca.

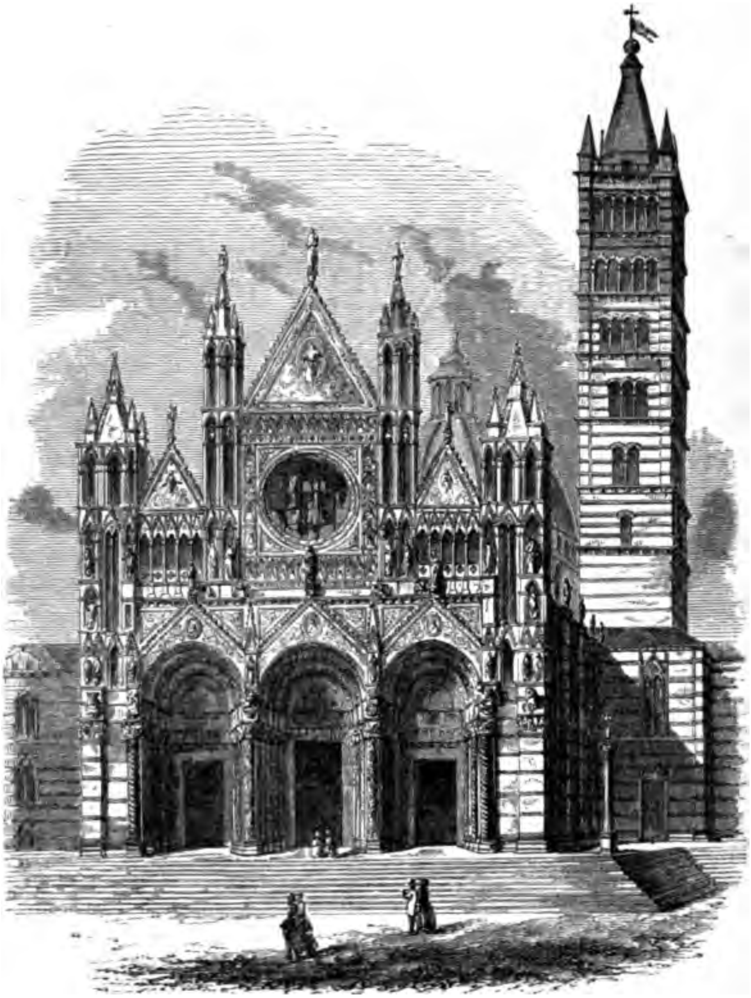
The church of San Martino at Lucca, built about a century after Sta. Anastasia (middle of 14th century), presents a strikingly happy compromise between the two styles. The pier-arches are still too wide—23 ft. in the clear; but the defect is remedied to some extent by the employment of circular instead of pointed arches, and the triforium is all that can be desired; the clerestory, however, is as insignificant as it must be where the sun is so brilliant, and painted glass inadmissible. It would be easy to point out other defects; but, taking it altogether, there are few more elegant churches than this, and hardly one in Italy that so perfectly meets all the exigencies for which it was designed.

The cathedrals of Siena and Orvieto (the former commenced in 1243, the latter in 1290) are perhaps, taken altogether, the most successful specimens of Italian pointed Gothic. They are those at least in which the system is carried to the greatest extent without either foreign aid or the application of distinctly foreign details. These two buildings, moreover, both retain their façades as completed by their first architects, while the three great churches of this style—the cathedrals of Florence, Bologna, and Milan—were in this respect left unfinished, with many others of the smaller churches of Italy. The church at Siena illustrates forcibly the tendency of the Italian architects to adhere to the domical forms of the old Etruscans, which the Romans amplified to such an extent, and the Byzantines made peculiarly their own. I cannot but repeat my regret that the Italians alone, of all the Western Mediæval builders, showed any predilection for this form of roof. On this side of the Alps it could have been made the most beautiful of architectural forms. In Italy there is no instance of more than moderate success—nothing indeed, to encourage imitation. Even the example now before us is no exception to these remarks, though one of the boldest efforts of Italian architects. In plan it ought to have been an octagon, but that apparently would have made it too large for their skill to execute, so they met the difficulty by adopting a hexagon, which, though producing a certain variety of perspective, fits awkwardly with the lines of columns, and twists the vaults to an unpleasant extent. Still a dome of moderate height, and 58 ft. in diameter, covering the centre of the church, and with sufficient space around to give it dignity, is a noble and pleasing feature, the merit of which it is impossible to deny. Combined with the rich colouring



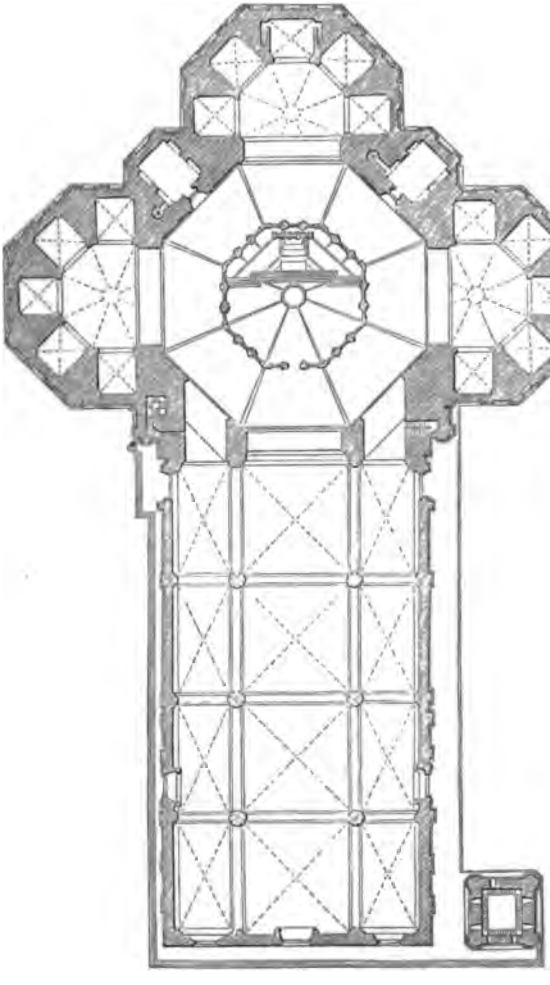
760. Plan of Cathedral at Siena. (From the 'Eglises Principales d'Europe.') Scale 100 ft. to 1 in.

and gorgeous furniture of the church, it makes up a whole of great beauty. The circular pier arches, however, and the black and white stripes by which the exterior is marked, detract considerably from the effect of the whole—at least in the eyes of strangers, though the Italians still consider it a beauty. The façade of this cathedral is represented in Woodcut No. 761. It consists of three great portals, the arches of which are equal in size, though the centre doorway is larger than those at the sides. Above is the invariable circular window of the Italian architects, and the whole is crowned by steep triangular gables.



761. Façade of the Cathedral at Siena.

The carved architectural ornaments of the façade are rich and elaborate in the extreme, though figured sculpture is used to a much less extent than in Northern portals of the same age. It is also observable that the strong horizontal lines do not harmonise with the aspiring character of pointed architecture.

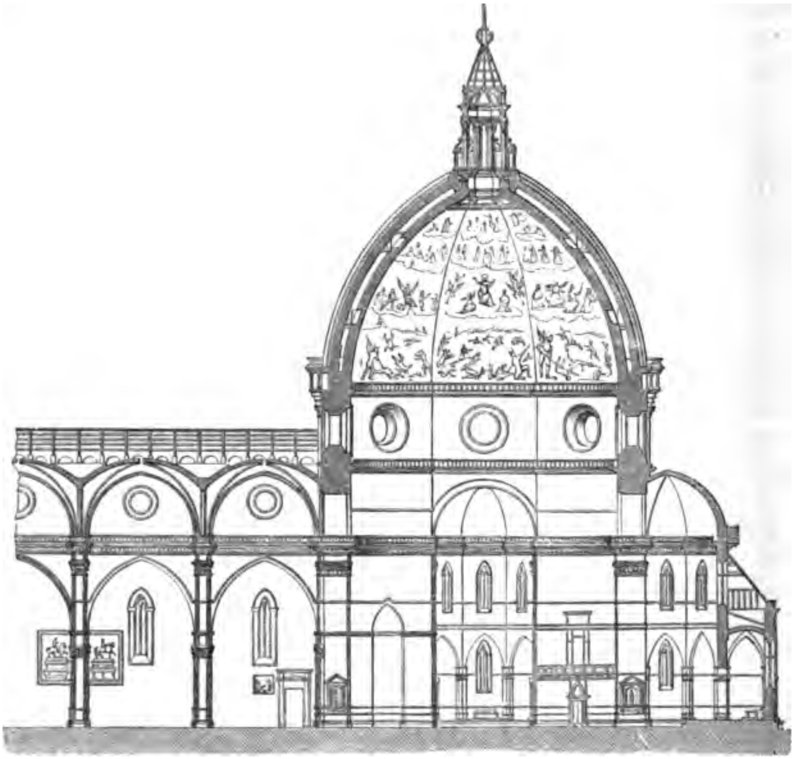


762. Plan of Cathedral at Florence. (From Isabelle, 'Edifices Circulaires.') Scale 100 ft. to 1 in.

The cathedral of Orvieto is smaller and simpler, and less rich in its decorations, than that at Siena, with the exception of its façade, which is adorned with sculpture and painting. Indeed the three-gabled front may be considered the typical one for churches of this class. The façades intended to have been applied to the churches at Florence, Bologna, Milan, and elsewhere, were no doubt very similar to that represented in Woodcut No. 761. As a frontispiece, if elaborately sculptured and painted, it is not without considerable appropriateness and even beauty; but, as an architectural object, it is infinitely inferior to the double-towered façades of the Northern cathedrals, or even to those with only one great tower in the centre. It has besides the defect of not expressing what is behind it; the central gable being always higher than the roof, and the two others merely ornamental appendages. Indeed, like the

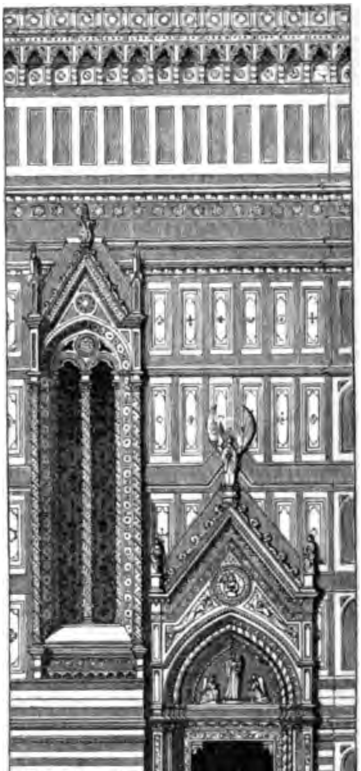
Italian Gothic buildings generally, it depended on painting, sculpture, and carving for its effect, far more than on architectural design properly so called.

Among the greatest and most complete examples of Italian Gothic is the church of Sta. Maria dei Fiori, the cathedral of Florence, one of the largest and finest churches produced in the Middle Ages—as far as mere grandeur of conception goes, perhaps the very best, though considerably marred in execution from defects of style, which are too apparent in every part.



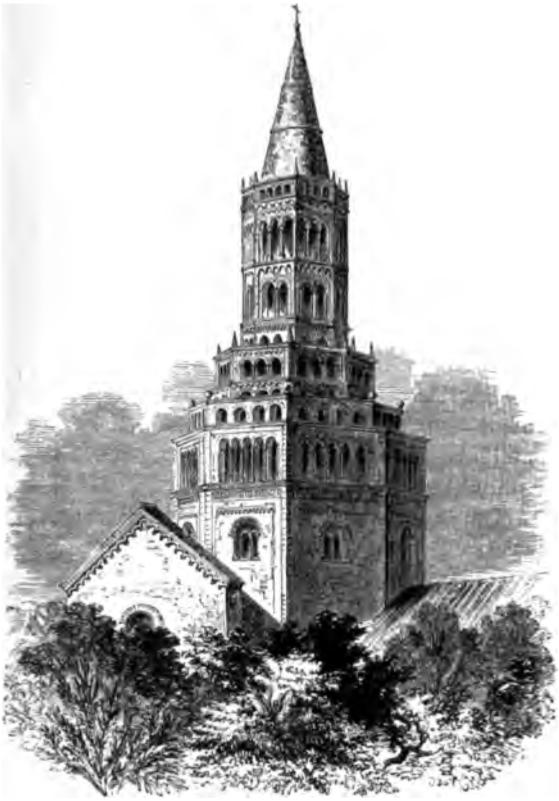
763. Section of Dome and part of Nave of the Cathedral at Florence. Scale 100 ft. to 1 in.

The building of the church was commenced in the year 1294 or 1298 (it is not quite clear which), from the designs and under the superintendence of Arnolfo di Lapo, for unfortunately in this style we know the names of all the architects, and all the churches show traces of the caprice and of the misdirected efforts of individuals, instead of the combined national movement which produced such splendid results in France and England. It is not known how far Arnolfo had carried the building when he died, in 1310, but probably up to the springing of the vaults. After this the works proceeded more leisurely, but the nave and smaller domes of the choir were no doubt completed as we now find them in the first twenty years of the 14th century. The great octagon remained unfinished, and if covered in at all it was only by a wooden roof of domical outline externally, which seems to be that represented in the fresco in the convent of San Marco, till Brunelleschi commenced the present dome, in 1420, and completed it in all essential parts before his death, which happened in 1444. The building may therefore be considered as essentially contemporary with the cathedral of Cologne, which it very nearly equals in size (its area being 84,802 ft., while that of Cologne is estimated at 91,000), and, as far as mere conception of plan goes, there can be little doubt but that the Florentine cathedral far surpasses its German rival. Nothing indeed can be finer than its general ground-plan. A vast nave leads to an enormous dome, extending into the triapsal arrangement so common in the early churches of Cologne, and which was repeated in the last and greatest effort of the Middle Ages, or rather the first of the new school—the great church of St. Peter at Rome. In the Florentine church all these parts are better subordinated and proportioned than in any other example, and the mode in which the effect increases and the whole expands as we approach from the entrance to the sanctum is unrivalled. All this, alas! is utterly thrown away in the execution. Like all inexperienced architects, Arnolfo seems to have thought that largeness of parts would add to the greatness of the whole, and thus used only four great arches in the whole length of his nave, giving the central aisle a width of 55 ft. clear. The whole width is within 10 ft. of that of Cologne, and the height about the same; and yet, in appearance, the height is about half, and the breadth less than half, owing to the better proportion of the parts and to the superior appropriateness in the details on the part of the German cathedral. At Florence the details are positively ugly. The windows of the side-aisles are small and misplaced, those of the clerestory mere circular holes. The proportion of the aisles one to another is bad, the vaults ill-formed, and altogether a colder and less effective design was not produced in the Middle Ages. The triapsal choir is not so objectionable as the nave, but there are large plain spaces that now look cold and flat; the windows are too few and small, and there is a gloom about the whole which is very unsatisfactory. It is nearly certain that the original intention was to paint the walls, and not to colour the windows, so that these defects are hardly chargeable to the original design, and would not be apparent now were it not that in a moment of mistaken enthusiasm the Florentines were seized with a desire to imitate the true style of Gothic art, and rival Northern cathedrals in the glory of their painted glass. This, in a church whose windows were designed only of such dimensions as were sufficient to admit the requisite quantity of white light, was fatal. Notwithstanding the beauty of the glass itself, which seems to have been executed at Lubeck, 1434, from Italian designs, it is so completely out of place that it only produces irritation instead of admiration, and has certainly utterly destroyed the effect and meaning of the interior it was intended to adorn.



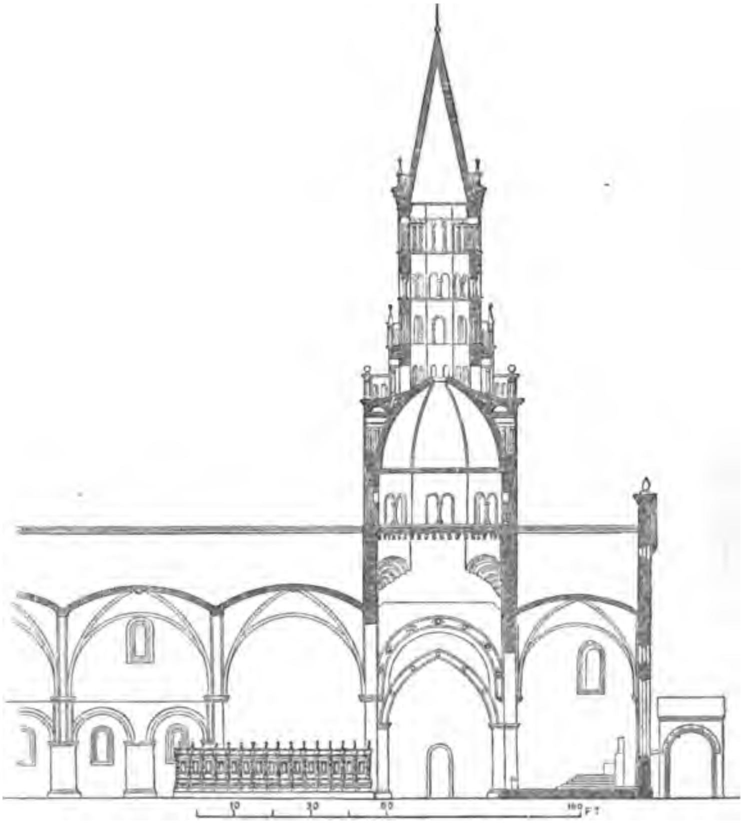
764. Part of the Flank of Cathedral at Florence.

Externally the façade was never finished, and we can only fancy what was intended from the analogy of Siena and Orvieto. The flanks of the nave are without buttresses or pinnacles, and, with only a few insignificant windows, would be painfully flat except for a veneer of coloured marbles disposed in panels over the whole surface. For an interior or a pavement such a mode of decoration is admissible; but it is so unconstructive, so evidently a mere decoration, that it gives a weakness to the whole, and a most unsatisfactory appearance to so large a building. This is much less apparent at the east end, where the outline is so broken, and the main lines of the construction so plainly marked, that the mere filling-in is comparatively unimportant. This is the most meritorious part of the church, and so far as it was carried up according to the original design, is extremely beautiful. Even the plainness and flatness of the nave serve as a foil to set off the varying outline of the choir. Above the line of the cornice of the side-aisles there is nothing that can be said to belong to the original design except the first division of the drum of the dome, which follows the lines of the clerestory. It has long been a question what Arnolfo originally intended, and especially how he meant to cover the great octagonal space in the centre. All knowledge of his intentions seems to have been lost within a century after his death: at least, in the accounts of the proceedings of the commission which resulted in the adoption of Brunelleschi's design for the dome, no reference is made to any original design as then existing, and no one appears to have known how Arnolfo intended to finish his work. Judging from the structure as far as he carried it, and with the knowledge we now possess of the Italian architecture of that age, we can easily conjecture what his design for its completion may have been. Internally, it probably consisted of a dome something like the present, but flatter, springing from the cornice 40 ft. lower than the present one, and pierced with large openings on each of its eight faces.


765. Dome at Chiaravalle, near Milan. (From a Drawing by Ed. Falkener, Esq.)

Externally two courses were open to him. The first and most obvious was to hide the dome entirely under a wooden roof, as is done in St. George's, Thessalonica (Woodcut No. 878), or in the baptistery in front of the cathedral, and is done in half the baptisteries in Italy—as at Parma, for instance (Woodcut No. 780). Had he done this the span of the dome might have been very much larger, without involving any constructive difficulties, and the three towers over the choir and transepts might have sufficed to relieve its external appearance sufficiently for architectural effect. On the whole, however, I am rather inclined to believe that something more ambitious than this was originally proposed, and that the design was more like that of Chiaravalle near Milan, built in 1221, and one of the most complete and perfect of this class of dome now existing in Italy. Its external appearance may be judged of from Woodcut 765, and its constructive details from the section, Woodcut No. 766.

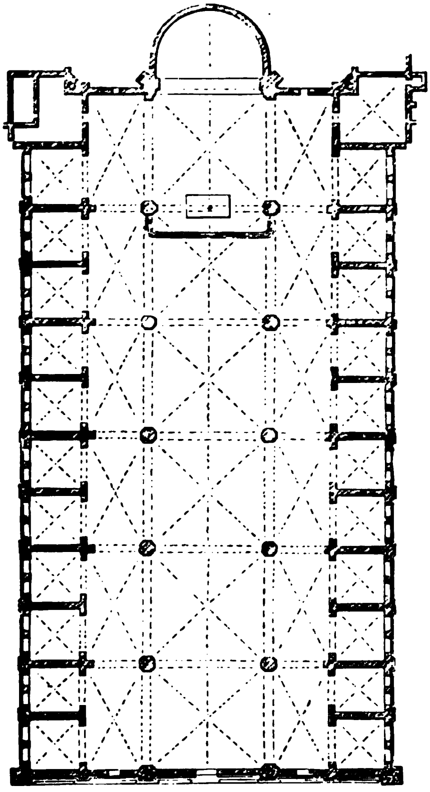
If the basement is sufficiently solid—and that at Florence is more than sufficient for any superstructure of the sort—it is evident the architect can dispose of such masses of masonry, that he can counteract any thrust or tendency to spread that can exist in any dome of this sort, and instead of being only 136 ft. across, 150 or 160 might easily have been attempted. Instead of 375 ft., which is the height of the present dome from the floor to the top of the cross externally, it might even with the present diameter have been carried up to at least 500 ft., or as high as the church was long,—70 to 100 ft. above the height of St. Peter's at Rome.



766. Section of Eastern portion of Church at Chiaravalle. (From Gruner's 'Terra Cotta Architecture in Italy.') Scale 50 ft. to 1 inch.

Had this been done, the three smaller semi-domes must have been intended to be crowned with miniature octagonal spires of the same class with the great dome, and between these the vast substructures show that it was intended to carry up four great spires, probably to a height of 400 ft.

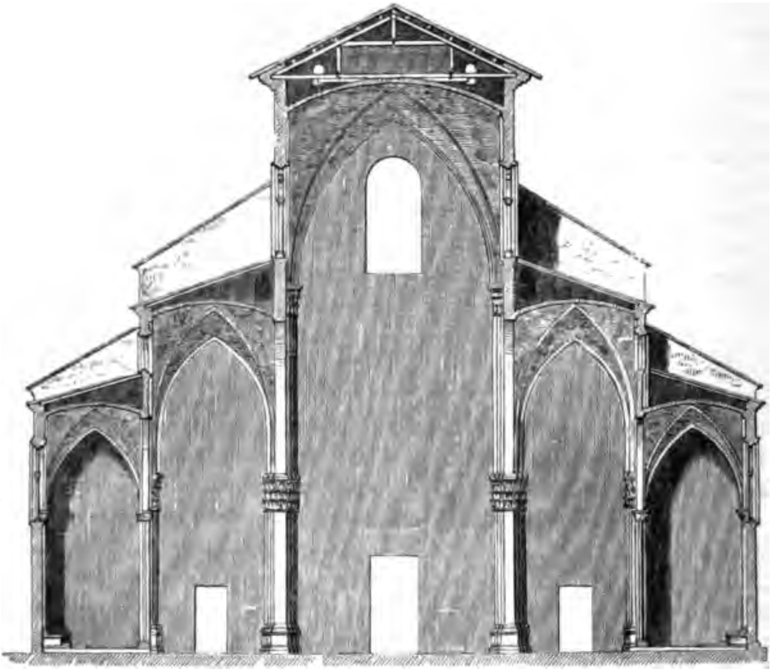
Had all this been done (and something very like it seems certainly to have been intended), neither Cologne Cathedral, nor any church in Europe, ancient or modern, would have been comparable to this great and glorious apse. As it is, the plain, heavy, simple outlined dome of Brunelleschi acts like an extinguisher, crushing all the lower part of the composition, and both internally and externally destroying all harmony between the parts. It has deprived us of the only chance that ever existed of witnessing the effect of a great Gothic dome; not indeed such a dome as might with the same dimensions have been executed on this side of the Alps, but still in the spirit, and with much of the poetry, which gives such value to the conceptions of the builders in those days.



767. Plan of the part executed of St. Petronio, Bologna. (From Wiebeking.) Scale 100 ft. to 1 in.

But for this change of plan, the ambition of the Florentines might have been in some measure satisfied, whose instructions[1] to the architect were, that their cathedral "should surpass everything that human industry or human power had conceived of great and beautiful."

About a century later (1390), the Bolognese determined on the erection of a monster cathedral, which, in so far as size went, would have been more than double that at Florence. According to the plans that have come down to us, it was to have been about 800 ft. long and 525 wide across the transepts; at the intersection was to have been a dome 130 ft. in diameter, or only 6 ft. less than that at Florence; and the width of both nave and transepts was to have been 183 ft.: so that the whole would have covered about 212,000 ft., or nearly the same area as St. Peter's at Rome, and three times that of any French cathedral! Of this vast design, only about one-third (Woodcut No. 767), or 74,000 sq. ft., was ever carried out; but that fragment is quite sufficient to enable us to judge of the merits or defects of this style in its state of greatest perfection. The only other building in the same style on a sufficient scale to admit of comparison with this is the nave of the cathedral at Florence just described, but that is nearly as may be only half of its dimensions, or 36,000 ft. as compared with 72,000. The chapels, too, at Bologna add practically a fifth aisle, giving great variety and richness to the perspective. The varied heights and proportions of the central and side aisles are singularly pleasing, and there being six arches at Bologna instead of only four as at Florence, and twelve side chapels where none exist in the other example, go far to redeem the lean mechanical look which is the great defect of this style. The great advantage San Petronio has over the Florentine church is in the size and number of its windows, and these not being filled with stained glass the whole church has a bright and pleasing effect that contrasts most favourably with the gloom of its great rival. Notwithstanding this, the nave of San Petronio cannot be considered as a successful work of art. In the first place it is too mechanically perfect. The area of the points of support as compared with the voids are, as far as can be made out from such plans as exist, about one-twelfth, which would be a merit in a railway station, but something more is wanted in a monumental building. In the next



768. Section of San Petronio, Bologna. (From Wiebeking.) Scale 50 ft. to 1 in.

there is a singular deficiency of either constructive or constructed ornament. On this side of the Alps an architect with vaulting shafts, string-courses, galleries, and fifty other expedients, would have relieved the bareness of the walls. At Bologna it probably was intended they should be painted, and this never having been executed may account for most of its apparent defects.

In Gothic architecture one of two systems seems indispensable: either painted glass with strongly-marked carved mouldings over the whole of the interior, or white glass with flat surfaces suitable for opaque paintings. Few cathedrals are complete in both respects at the present day, but in their imperfect state the Northern system has an immense advantage over the Southern. The architecture of our cathedrals is complete and beautiful even in ruins. An Italian church without its coloured decoration is only a framed canvas without harmony or meaning. Were San Petronio as complete in its coloured decoration as the Certosa at Pavia or Monreale at Palermo, it might stand a fair competition with the best interiors on this side of the Alps. As it is, it is only a splendid example of ornamental but unornamented construction, and, as was attempted to be explained in the Introduction, both elements are wanted for success in architectural design.

The exterior of the church is in too unfinished a state to enable us to judge of what its effect might have been if completed, but many of its details, especially of the façade, are of very great beauty, in many respects superior to what is to be found on this side of the Alps. Its central dome, however, never could have been a feature worthy of so vast a church. In diameter it is equal, or nearly so, to that of Florence, but the points of support are so small, and so far apart, that it must have been mainly if not wholly of wood. No such towering structure as Arnolpho's vast substructures show that he intended, could have stood on the slim supports of the Bolognese church.[1]

The cathedral of Milan—at once the most remarkable and one of the largest and richest of all the churches erected in the Middle Ages—was commenced in the year 1385, by order of Gian Galeazzo, first Duke of Milan, and consecrated in 1418, at which date all the essential parts seem to have been completed, though the central spire was not finished till about the year 1440, by Brunelleschi.

The design is said to have been furnished by a German architect, Heinrich Arlez von Gemunden, or as the Italians call him, "da Gamondia,"—a statement which is corroborated by the fact that the details and many of the forms are essentially Northern; but it is equally certain that he was not allowed to control the whole, for all the great features of the church are as thoroughly Italian as the details are German: it is therefore by no means improbable that Marco da Campione, as the Italians assert, or some other native artist, was joined with him or placed over him.

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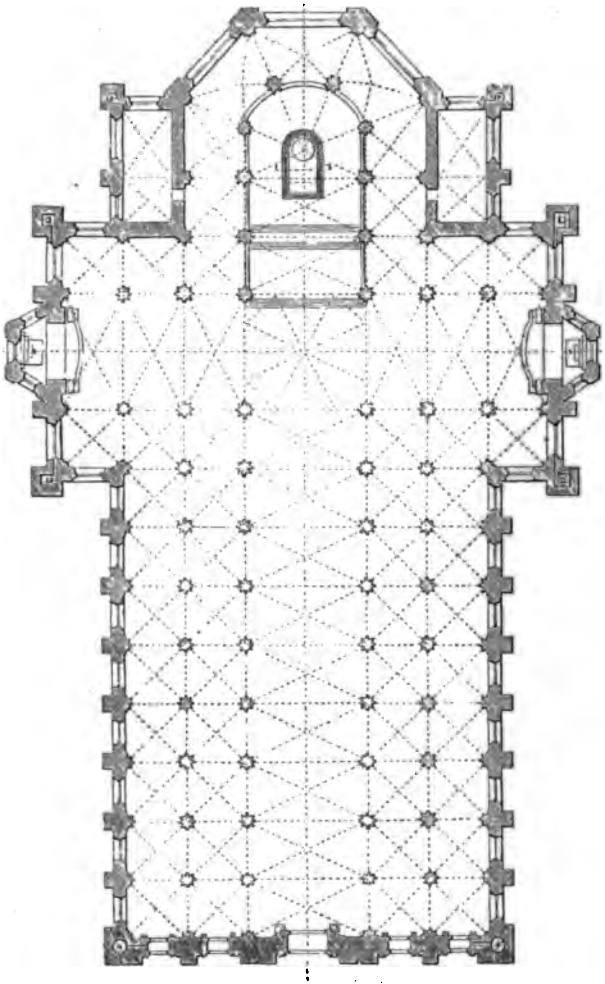
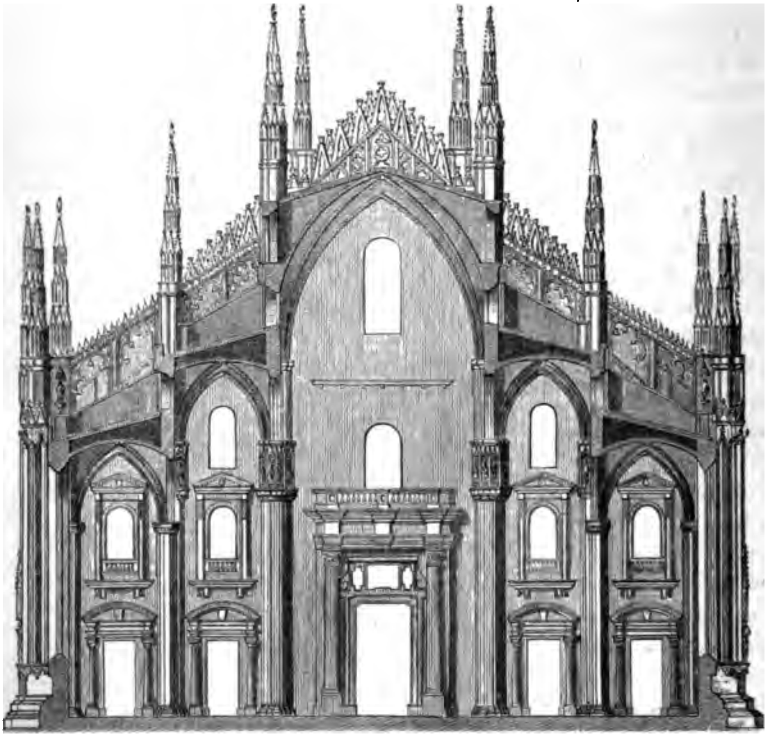
[1] If we may trust Wiebeking, the first two bays of the nave from the front were vaulted in 1588, but the work was suspended till 1647, and completed only in 1659. Yet no difference can be perceived in the details of the design.



769. Plan of the Cathedral of Milan. (From 'Chiesi Principali d'Europa.') Scale 100 ft. to 1 in.

In size it is, except Seville, the largest of all Mediæval cathedrals, covering 107,782 ft. In material it is the richest, being built wholly of white marble, which is scarcely the case with any other church, large or small; and in decoration it is the most gorgeous — the whole of the exterior is covered with tracery, and the amount of carving and statuary lavished on its pinnacles and spires is unrivalled in any other building of Europe. It is also built wholly (with the exception of the façade) according to one design. Yet with all these advantages, the appearance of this wonderful building is not satisfactory to any one who is familiar with the great edifices on this side of the Alps. Cologne, if complete, would be more beautiful; Rheims, Chartres, Amiens, and Bourges leave a far more satisfactory impression on the mind; and even the much smaller church of St. Ouen will convey far more pleasure to the true artist than this gorgeous temple.

The cause of all this it is easy to understand, since all or nearly all its defects arise from the introduction of Italian features into a Gothic building; or rather, perhaps, it should be said, from a German architect being allowed to ornament an Italian cathedral. Taking the contemporary cathedral of St. Petronio at Bologna as our standard of comparison, it will be seen that the sections (Woodcuts Nos. 768, 770) are almost identical both in dimensions and in form, except that at Milan the external range is a real aisle instead of a series of side chapels; but at the same time, it will be perceived that the German system prevailed in doubling the number of the piers between the nave and side-aisles. So far, therefore, the German architect saved the church. The two small clerestories, however, still remain; and although the design avoids the mullionless little circles of Bologna,



770. Section of Cathedral of Milan.[1] (From Wiebeking.) Scale 50 ft. to 1 in.

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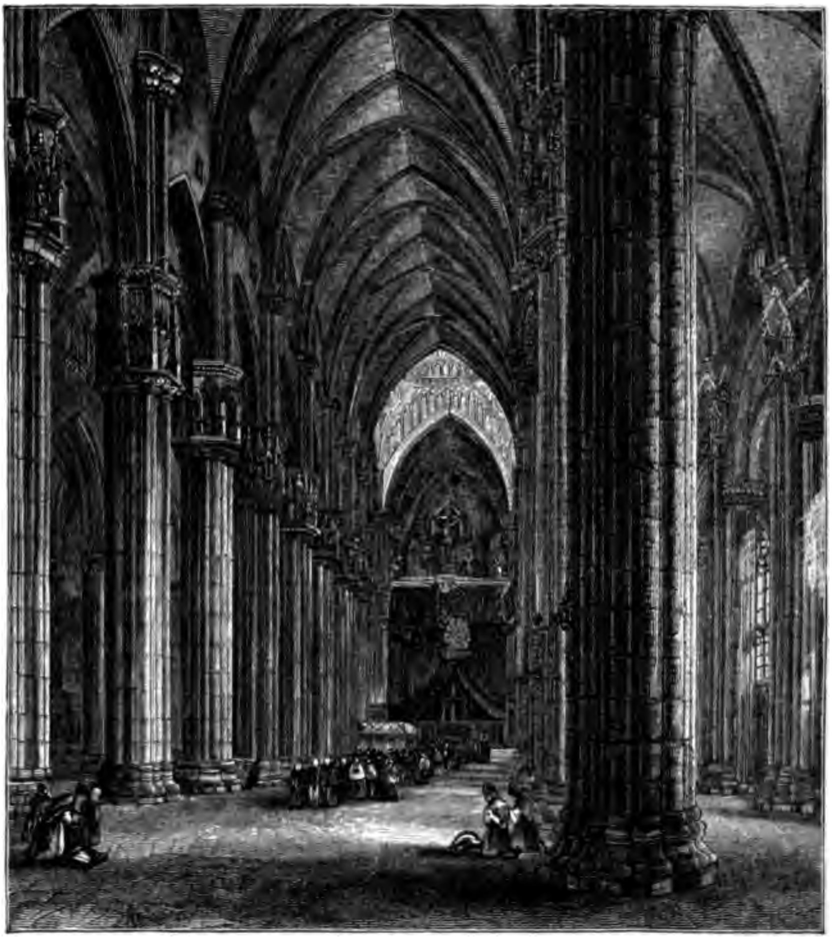
[1] The plan and section being taken from two different writers, there is a slight [illegible]pancy between the scales. I believe the plan to be the more correct of the two, though I have no means of being quite certain on the point.

there is only space for small openings, which more resemble the windows of an attic than of a clerestory. The greater quantity of light being thus introduced by the tall windows of the outer aisle, the appearance is that of a building lighted from below, which is fatal to architectural effect.

The model still preserved on the spot shows that the German architect designed great portals at each end of the transepts. This, however, was overruled in favour of two small polygonal apses. Instead of the great octagonal dome which an Italian would have placed upon the intersection of the whole width of the nave and transepts, German influence has confined it to the central aisle, which is perhaps more to be regretted than any other mistake in the building.



771. View of the Interior of Milan Cathedral. (From Rosengarten.)

The choir is neither a French chevet nor a German or Italian apse, but a compromise between the two; a French circlet of columns enclosed in a German polygonal termination. This part of the building, with its simple forms and three glorious windows, is perhaps an improvement on either of the models of which it is compounded.

This is the nearest approach to the French chevet arrangement to be found in all Italy. It is extremely rare in that country to find an aisle running round the choir, and opening into it, or with the circlet of apsidal chapels which is so universal in France. The Italian church is not, in fact, derived from a combination of a circular Eastern church with a Western rectangular nave, but is a direct copy from the old Roman basilica.

The details of the interior of Milan are almost wholly German (Woodcut No. 771). The great capitals of the pillars, with their niches and statues, are the only compromise between the ordinary German form and the great deep ugly capitals—fragments, in fact, of classical entablatures—which disfigure the cathedrals of Florence and Bologna, and so many other Italian churches. Had the ornamentation of these been carried up to the springing of the vault, they would have been unexceptionable: as it is, with all their richness, their effect is unmeaning.

Externally, the appearance is in outline not unlike that of Sta. Maria dei Fiori; the apse is rich, varied, and picturesque, and the central dome (excepting the details) similar, though on a smaller scale, to what I believe to have been the original design of the Florentine church. The nave is nearly as flat as at Florence, the clerestory not being visible; but the forest of pinnacles and flying buttresses and the richness of the ornamentation go far to hide that defect. The façade was left unfinished, as was so often the case with the great churches of Italy. Pellegrini was afterwards employed to finish it, and a model of his design is still preserved. It is fortunate that his plan was not carried out. The façade was finished, as we now see it, from the designs of Amati, by order of Napoleon. It is commonplace, as might be expected from its age, but inoffensive. The doorways are part of Pellegrini's design, and the Mediæval forms being placed over those of the cinque-cento, produce a strangely incongruous effect. For the west front several original designs are still preserved. One of these, with two small square towers at the angles, as at Vercelli and elsewhere, was no doubt the Italian design. The German one (Woodcut No. 772) is preserved by Bassi:[1] had this been executed; the façade would have been about one-third (viz. 100 ft.) wider than that of Cologne. Had the height of the towers been in the same proportion, they would have been the tallest in the world. In that case the effect here, as at Cologne, would have been to shorten and overpower the rest of the building to a painful extent. A design midway between the two, with spires rising to the same height as the central one, or about 360 ft., would perhaps have the happiest effect. At any rate, the want of some such features is greatly felt in the building as it stands.

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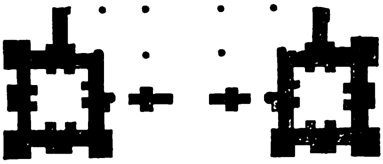
[1] 'Dispareri d'Architettura.'



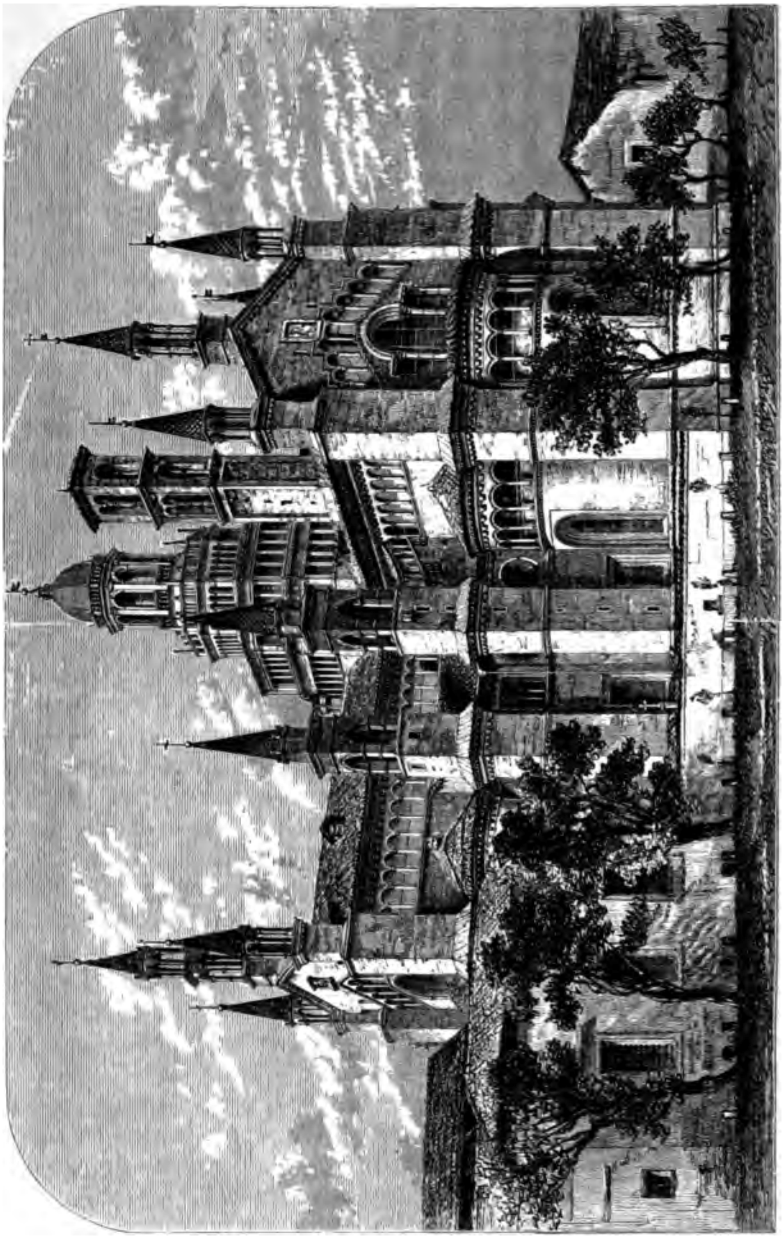
772. Design for Façade of Milan Cathedral. (From Bassi.)

The Certosa, near Pavia, was commenced about the same date (1396) as the cathedral at Milan. It is seldom that we find two buildings in the Middle Ages so close to one another in date and locality, and yet so dissimilar. There is no instance of such an occurrence on this side of the Alps, till modern times; and it shows that in those days the Italians were nearly as devoid of any distinct principles of architecture as we have since become.

The great difference between Pavia and Milan is that the former shows no trace of foreign influence. It is as purely Italian as St. Petronio, and by no means so complete or consistent in design. Nothing, in fact, can be more painful than the disproportion of the parts, the bad drawing of the details, the malformation of the vaults, and the meanness of the windows; though all these defects are completely hidden by the most gorgeous colouring, and by furniture of such richness as to be almost unrivalled. So attractive are these two features to the majority of spectators, and so easily understood, that nine visitors out of ten are delighted with the Certosa, and entirely forget its miserable architecture in the richness and brilliancy of its decorations.

Externally the architecture is better than in the interior. From its proximity to Pavia, it retains its beautiful old galleries under the roof. Its circular apses, with their galleries, give to this church, for the age to which it belongs, a peculiar character, harmonising well with the circular headed form, which nearly all the windows and openings present. Even in the interior there are far more circular than pointed arches.

The most beautiful and wonderful part of the building is the façade. This was begun in 1473, and is one of the best specimens in Italy of the Renaissance style. It would hardly, therefore, be appropriate to mention it here, were it not that the dome over the intersection of the nave and transepts is of the same age and style, but reproduces so exactly (except in details) what we fancy the Mediæval Italian Gothic dome to have been, that it may be considered as a feature of the earlier ages. Referring to Woodcut No. 765, it will be



772. View of the Certosa, near Pavia. (From a Photograph.)

seen how like it is to that of Chiaravalle in outline. It is less tall, however, and if translated into the details of the great church at Florence, would fit perfectly on the basement there prepared for such a feature.

Like many other churches in Northern Italy, the principal parts of the Certosa are built in brick, and the ornamental details executed in terra cotta. Some of the latter, especially in the cloisters, are as beautiful as any executed in stone in any part of Italy during the Middle Ages; and their perfect preservation shows how suitable is the material for such purposes. It may not be appropriate for large details or monumental purposes, but for the minor parts and smaller details, when used as the Italians in the Middle Ages used it, terra-cotta is as legitimate as any material anywhere used for building purposes; and in situations like the alluvial plains of the Po, where stone is with difficulty obtainable, its employment was not only judicious but most fortunate in its results.

It would be a tedious and unprofitable task to attempt to particularise all the churches which were erected in this style in Italy, as hardly one of them possesses a single title to admiration beyond the very vulgar one of size. To this Santa Croce, at Florence, adds its association with the great men who lie buried beneath it, and Sta. Maria Novella can plead the circumstance—exceptional in that city—of possessing a façade;[1] but neither of these has anything to redeem its innate ugliness in the eyes of an architect.

There are two great churches of this period at Venice, the San Giovanni e Paolo (1246–1420), and the Frari (1250); they are large and richly ornamented fabrics, but are both entirely destitute of architectural merit.

A much more beautiful building is the cathedral at Como, the details of which are so elegant and so unobtrusively used as in great measure to make up for the bad arrangement and awkward form of the whole. In design it is, however, inferior to that of the Duomo at Ferrara (Woodcut No. 774). The latter does not display the richness of the façades of Siena or Orvieto, nor the elegance of that last named; but among the few Italian façades which exist, it stands pre-eminent for sober propriety of design and the good proportions of all its parts. The repose caused by the solidity of the lower portions, and the gradual increase of ornament and lightness as we ascend, all combine to render it harmonious and pleasing. It is true it wants the aspiring character and bold relief of Northern façades; but these do not belong to the style, and it must suffice if we meet in this style with a moderate amount of variety, undisturbed by any very prominent instances of bad taste.

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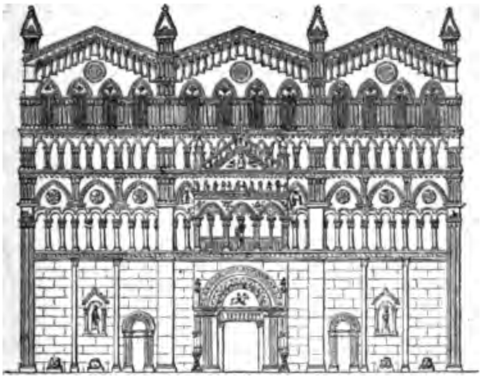
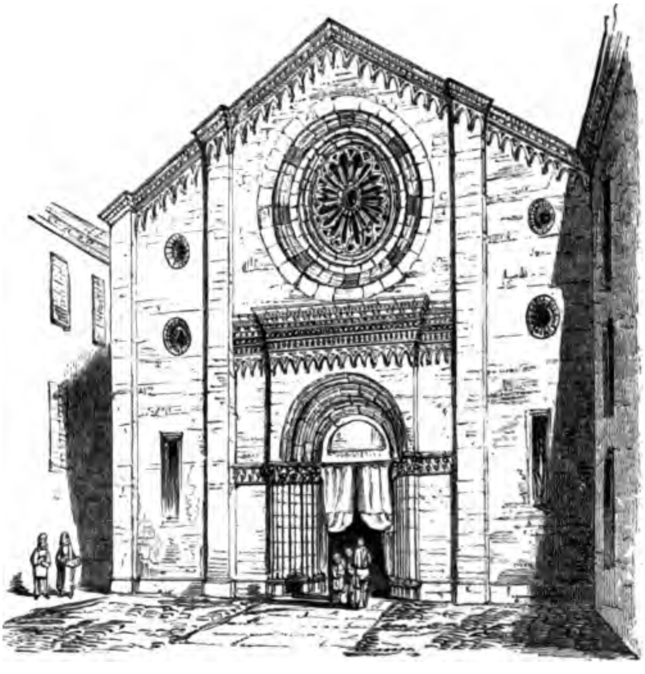
[1] Within the last few years a façade has been added to Sta. Croce, but about which the less said the better. It is wretched in design.

The true type of an Italian façade is well illustrated in the view of St. Francesco at Brescia (Woodcut No. 775), which may be considered the germ of all that followed. Whether the church had three aisles or five, the true Italian façade in the age of pointed architecture was always a modification or extension of this idea, though introduced with more or less Gothic feeling according to the circumstances of its erection.



774. Duomo at Ferrara. (From Hope's 'Architecture.') Scale 50 ft. to 1 in.

At Florence there is a house or warehouse, converted into a church,—Or (horreum) San Michele, which has attracted a good deal of attention, but more on account of its curious ornaments than for beauty of design—which latter it does not, and indeed can hardly be expected to possess. The little chapel of Sta. Maria della Spina,

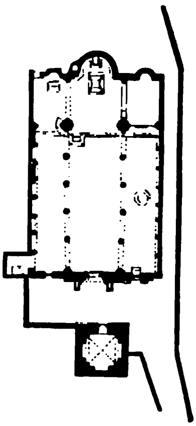


775. View of St. Francesco, Brescia. (From Street's 'Brick and Marble in the Middle Ages.')

at Pisa, owes its celebrity to the richness of its niches and canopies, and to the sculpture which they contain. In this the Italians were always at home, and probably always surpassed the Northern nations. It was far otherwise with architecture, properly so called. This, in the age of the pointed style, was in Italy so cold and unmeaning, that we do not wonder at the readiness with which the Italians returned to the classical models. They are to be forgiven in this, but we cannot so easily forgive *our* forefathers, who abandoned a style far more beautiful than that of Italy to copy one which they had themselves infinitely surpassed; and this only because the Italians, unable either to comprehend or imitate the true principles of pointed art, were forced to abandon its practice. Unfortunately for us, they had in this respect in that age sufficient influence to set the fashion to all Europe.

TOSCANELLA.

On the boundary line which separates the Guelfic from the Ghibelline influence, there exist at Toscanella, near Viterbo, two churches of great beauty of detail; but which, as might almost be predicated from their situation, defy any attempt at classification. They are not Gothic, for they have no vaults, nor does their style suggest any vaulting contrivances. They are not Romanesque, for the tracery of their circular windows, their many-shafted doors, and generally their details, are such as to indicate a Northern rather than a Roman affinity. Still less is there any trace of Byzantine work about them. Under these circumstances, it is better to treat them as exceptional, than to attempt to give them a name which might mislead without conveying any correct information.



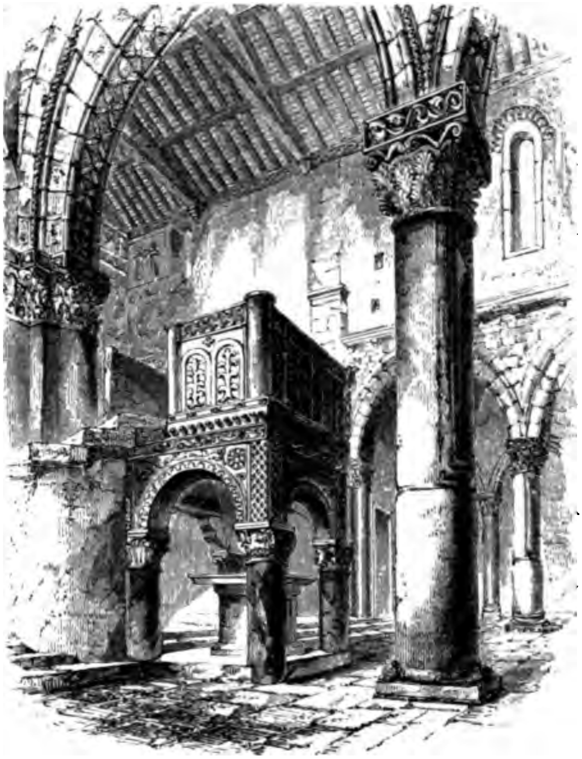
776. Plan of Sta. Maria, Toscanella. (From Gailhabaud.) Scale 100 ft. to 1 in.

The elder of these two churches, Sta. Maria, was erected in the beginning of the 13th century (1206?), but is so unlike most buildings of that age, that it is usually ascribed to the 6th or 7th. On a close examination, however, all its details are found to be full of advanced Gothic feeling, though used with Romanesque forms. The pillars are rude Corinthian, with a Gothic abacus. They are widely spaced, having no vault to support; and the mouldings of the arches are what we should call "Transitional Early English."

Externally the façade is too plain to be quite pleasing, but this arises from its depending originally on painting for its decoration—some traces of which still remain, but the greater part has perished.

Its three doorways are richly and beautifully ornamented with shafts and sculptured foliage, quite equal in detail to anything of the class to be found in Italy, and its great circular window would not be thought out of place at Chartres or Lincoln.

The church of St. Pietro is probably a century later than that of Sta. Maria, and its façade is richer and more elegant—a difference arising more from those details being in this instance carved which in the earlier church were painted. The design, however, deserves attention for its historical, perhaps, even more than its artistic claims; for it was this class of façade that Palladio and the architects of the cinque-cento period seized upon, and, applying pilasters and pediments of classical type, converted it into the fashionable churches which are to be found in every part of Europe.[1]



777. View of the Interior of Sta. Maria, Toscanella. (From Gailhabaud.)

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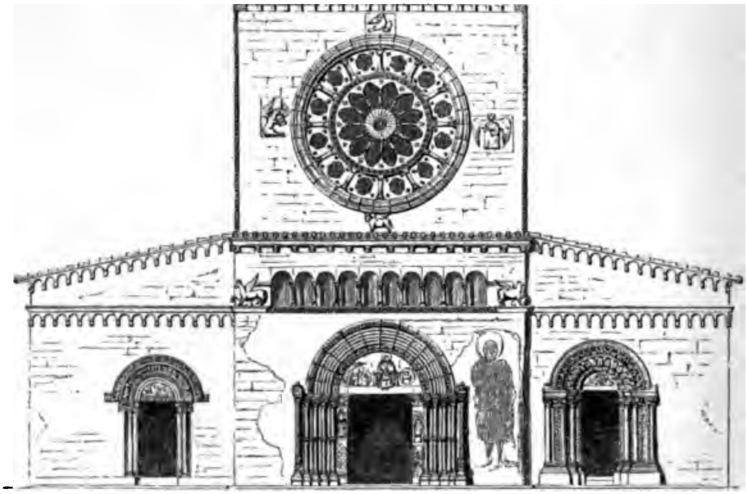
[1] The typical example of this class is the San Giorgio at Venice, though it is not by any means the one most like St. Pietro; many attempts were made before it became so essentially classical as this (see Woodcut No. 39 in the 'History of Modern Architecture.')

The difficulty which the Italians never entirely conquered, was how to amalgamate the sloping lines of the roofs of the aisles with the horizontal lines of the rest of the façade. The gallery over the central doorway enabled them very nearly to accomplish it in these Toscanella churches, and if the same string-courses had been carried all across, the whole might have been harmonised; but it was just missed, and what is strange, more so in the second than in the first example.



778. Elevation of the Exterior of Sta. Maria, Toscanella. (From Gailhabaud.) No scale.

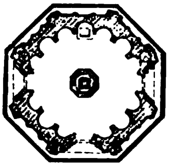
CHAPTER IV.

CONTENTS.

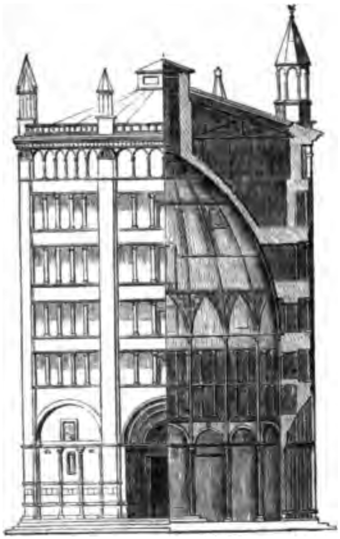
Circular churches — Towers at Prato and Florence — Porches — Civic buildings — Town-halls — Venice — Doge's palace — Cà d'Oro — Conclusion.

Circular Buildings.

There are very few specimens in Italy of circular or polygonal buildings of any class belonging to the Gothic age. As churches none are to be expected. Baptisteries had passed out of fashion. One such building, at Parma, commenced in 1196, deserves to be quoted, not certainly for its beauty, but as illustrating those false principles of design shown in every part of every building of this age in Italy. Externally the building is an octagon, six storeys in height, the four upper ones being merely used to conceal a dome, which is covered by a flat wooden roof. The lowest and the highest storeys are solid, the others are galleries supported by little ill-shaped columns. It is probable that this was not the original design of the architect, Antelami. No doubt he intended to conceal the dome, or at all events to cover it, as was the universal practice in Italy; but instead of a mere perpendicular wall as here used, the external outline should have assumed a conical form, which might have rendered it as pleasing as it is now awkward. We have no instance of a circular building carried out by Italian architects according to their own principles sufficiently far to enable us to judge what they were capable of in this style, unless perhaps it be the tombs of the Scaligers at Verona.



779. Baptistery, Parma. Scale 100 ft. to 1 in.

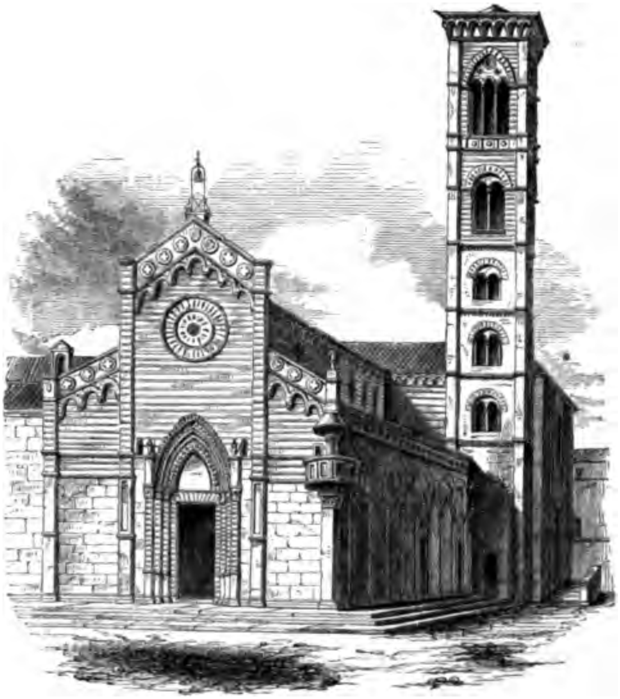


780. Baptistery at Parma, half Section, half Elevation. Scale 50 ft. to 1 in.

These take the circular or polygonal form appropriate to tombs, but are on so small a scale that they might rather be called crosses than mausolea; and though illustrating all the best principles of Italian design, and evincing an exuberance of exquisite ornament, they can hardly be regarded as important objects of high art. It is only from small buildings like these that we may recover the principles of this art as practised in Italy. Not being, like the Northern styles, a progressive national effort, but generally an individual exertion, if the first architect died during the progress of a larger building, no one knew exactly how he had intended to finish it, and its completion was entrusted to the caprice and fancy of some other man, which he generally indulged, wholly regardless of its incongruity with the work of his predecessor.

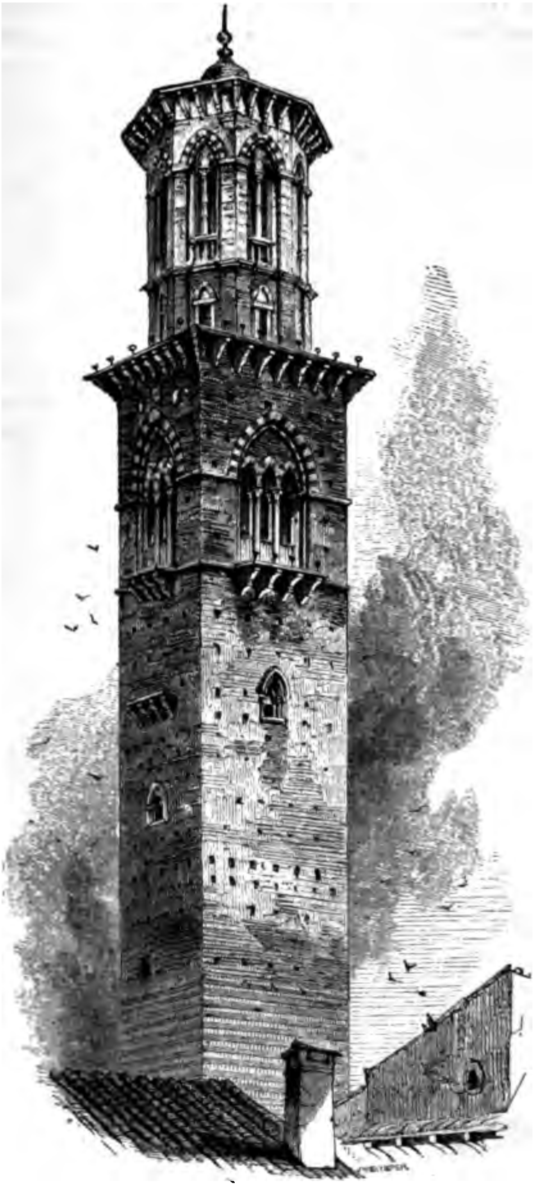
Towers.

The Italians in the age of pointed architecture were hardly more successful in their towers than in their other buildings, except that a tower, from its height, must always be a striking object, and, if both massive and high, cannot fail to have a certain imposing appearance, of which no clumsiness on the part of the architect can deprive



781. View of the Duomo at Prato. (From Wiebeking.)

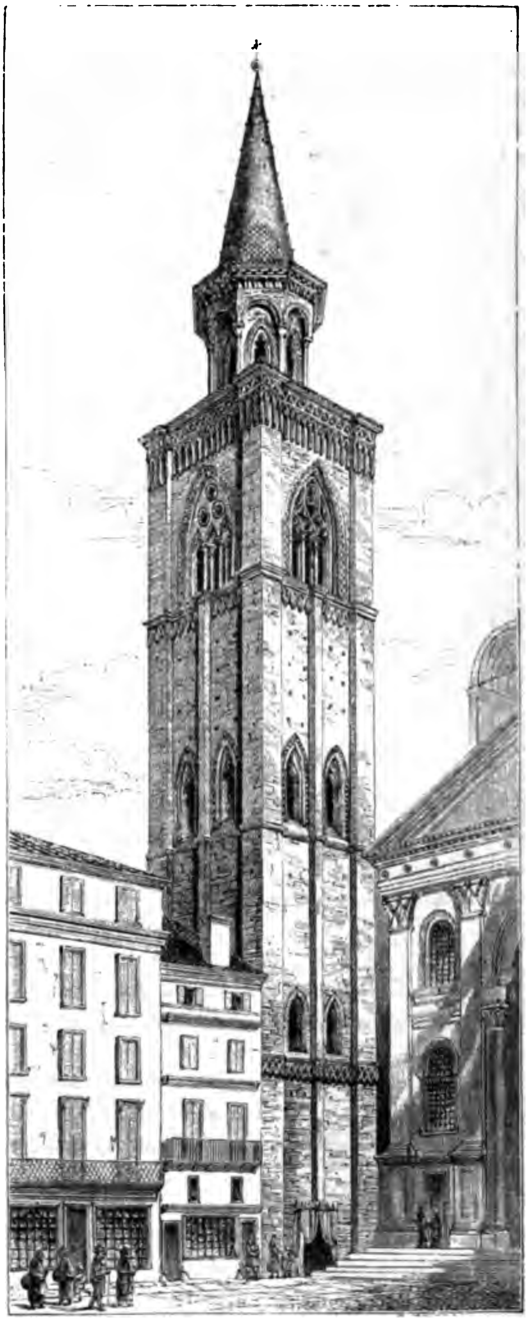
it. Such towers as the Asinelli and Garisenda at Bologna possess no more architectural merit than the chimneys of our factories. Most of those subsequently erected were better than these, but still the Italians never caught the true idea of a spire.



782. Campanile, Palazzo Scaligeri, Verona. (From Street.)

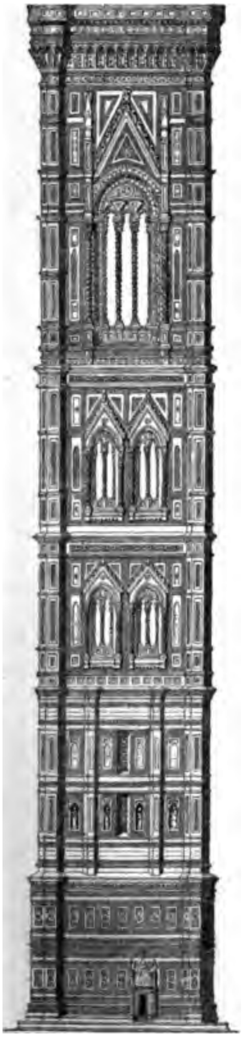
Throughout the whole of the Middle Ages they retained their affection for the original rectangular form, making their towers as broad at the summit as at the base. With very few exceptions, they are without buttresses, or any projection on the angles, to aid in giving them even an appearance of support. In consequence, when a spire was placed on such an edifice it always fitted awkwardly. The art by which a tower was prepared for its termination, first by the graduated buttresses at its base, then by the strongly marked vertical lines of its upper portion, and above all by the circle of spirelets at the top, out of which the central spire shot up as an absolute necessity of the composition—this art, so dear and so familiar to the Northern builders, was never understood by the Italians. If they, on the contrary, placed an octagon on their square towers, it looked like an accident for which nothing was prepared, and the spire was separated from it only by bold horizontal cornices, instead of by vertical lines, as true taste dictated.

In fact, the Italians seem to have benefited less by the experience or instruction of their Northern neighbours in tower-building than in any other feature of the style, and to have retained their old forms in these after they had abandoned them in other parts of their churches. The towers of Asti (1266) and Siena (rebuilt in 1389) are illustrated in Woodcuts Nos. 756 and 761. They certainly display but little art. A more pleasing specimen is the tower (Woodcut No. 781) attached to the Duomo at Prato (about 1312), which may be considered as a specimen of the very best class of Italian tower-design of the age, although in fact its only merit consists in the



783. Campanile, S. Andrea, Mantua. (From Street.)

increase in the size of the openings in every storey upwards, so as to give a certain degree of lightness to the upper part. On this side of the Alps the same effect was generally attained by diminishing the diameter. When a spire is to be added, that is the only admissible mode; but when the building is to be crowned by a cornice, as at Prato, the mode there adopted is perhaps preferable.



784. Campanile at Florence. (From Gailhabaud.) Scale 50 ft. to 1 in.

The tower which is attached to the palace of the Scaligeri at Verona (Woodcut No. 782) is perhaps as graceful as any other, and as characteristic of the Italian principles of tower-building. The lower part is absolutely plain and solid, the upper storey alone being pierced with one splendid three-light window in each face, with a boldly projecting cornice over it marking the roof. On this is placed an octagonal lantern two storeys in height. Had the lower portion of the lantern been broken by turrets or pinnacles at the angles, the effect would have been greatly improved. As it is, it seems only a makeshift to eke out the height of the whole; though the octagon with its boldly projecting cornice is as graceful as anything of the kind in Italian architecture.

The campanile attached to the church of St. Andrea at Mantua (Woodcut No. 783) is more nearly Gothic both in design and details. Its vertical lines are strongly marked, and the string-courses and cornices are of moulded brickwork, which is a pleasing and characteristic feature in the architecture of Lombardy.

The worst part of this design is the smallness of the octagon and spire, and the unconnected mode in which they are placed on the roof of the tower.

The typical example of Italian towers is that erected close to the Duomo at Florence from designs by Giotto, commenced in 1324, and considerably advanced, if not nearly finished, at the time of his death, two years afterwards.

Though hardly worthy of the praise which has been lavished on it, it is certainly a very beautiful building. Being covered with ornament from the base to the summit, it has not that nakedness which is the reproach of so many others, and the octagonal projections at the angles give it considerable relief. Besides this, the openings are very pleasingly graduated. It is virtually solid for about one-third of its height. The middle division consists of two storeys, each with two windows, while the upper part is lighted by one bold opening on each face, as at Prato. All this is good. One great defect of the composition is its parallelism. The slightest expansion of the base would have given it great apparent stability, which its height requires. Another fault is its being divided by too strongly marked horizontal courses into distinct storeys, instead of one division falling by imperceptible degrees into the other, as in Northern towers. It has yet another defect in common with the Duomo to which it belongs, namely, the false character of its ornamentation, which chiefly consists of a veneer of party-coloured slabs of marble,—beautiful in itself, but objectionable as not forming a part of the apparent construction.

The tower now rises to a height of 269 ft., and it was intended to have added a spire of about 90 ft. to this; but unless it had been more gracefully managed than is usual in Italy, the tower is certainly better without it. There is nothing to suggest a spire in the part already executed, nor have we any reason to believe that Giotto understood the true principles of spire-building better than his contemporaries.

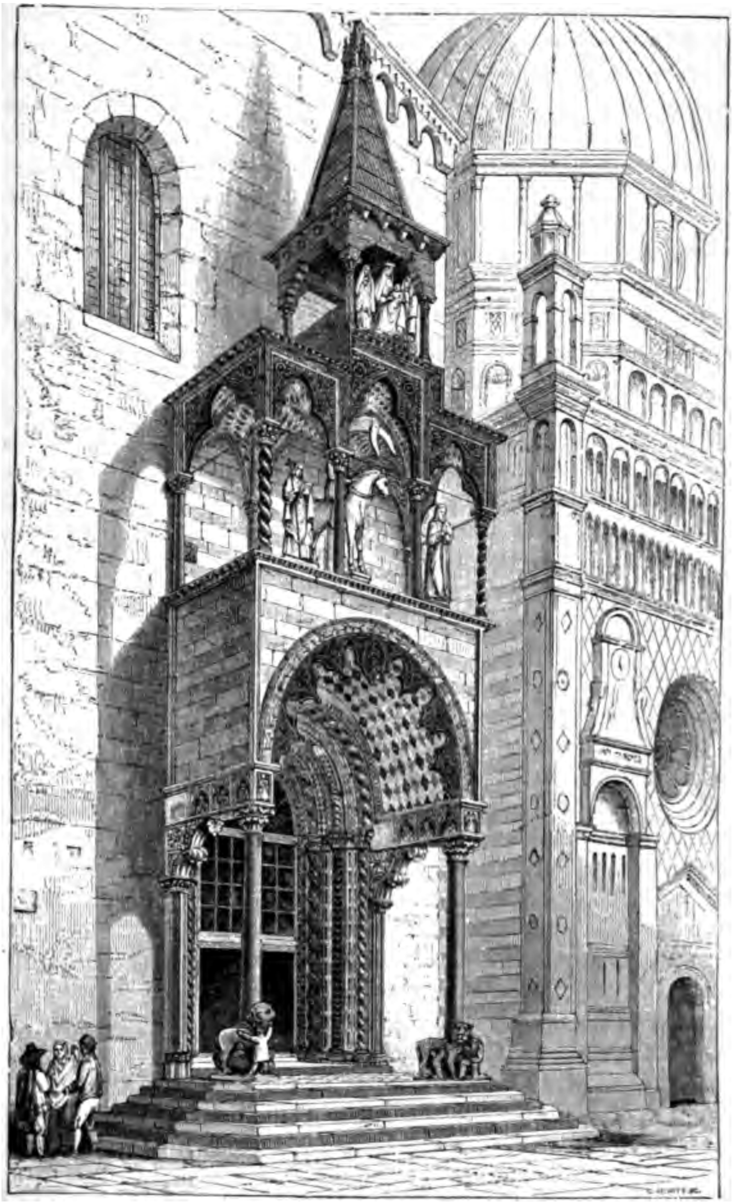
Porches.

Another feature very characteristic of the Gothic style in Italy is to be found in the porches attached to the churches. Generally they are placed on the flanks, and form side-entrances, and in most instances they were added after the completion of the body of the building, and consequently seldom accord in style with it. One has already been illustrated as attached to the church at Asti (Woodcut No. 756); another (Woodcut No. 764), belonging to the church of Sta. Maria dei Fiori at Florence, is an integral and beautiful part of the design.

One of the most characteristic specimens of the class in all Italy is that attached to the northern flank of the church of Sta. Maria Maggiore at Bergamo (Woodcut No. 785). The principal archway and the doorway within it are circular in form, although built in the middle of the 14th century, and are ornamented with trefoils and other details of the age. Above this are three trefoiled arches, the central one containing an equestrian statue of a certain Duke Lupus, at whose expense the porch was probably built, and above these is a little pagoda-like pavilion containing statues of the Virgin and Child.

The whole design is so unconstructive that it depends more on the iron ties that are everywhere inserted to hold it together than on any system of thrusts or counterpoises, which a true Gothic architect would certainly have supplied.

The two main pillars rest on lions, as is universally the case in these porches throughout Italy, though rarely found elsewhere.



785. North Porch, Sta. Maria Maggiore, Bergamo. (From Street's 'Brick and Marble of the Middle Ages.')

Like most of these Italian porches, this one will not stand criticism as a purely architectural object; but its details are so beautiful and its colours so fascinating that it pleases in spite of all its defects of design, and is more characteristic of the truly native feeling shown in the treatment of the pointed style of architecture than the more ambitious examples which were erected under direct foreign influence.

Civic Buildings.

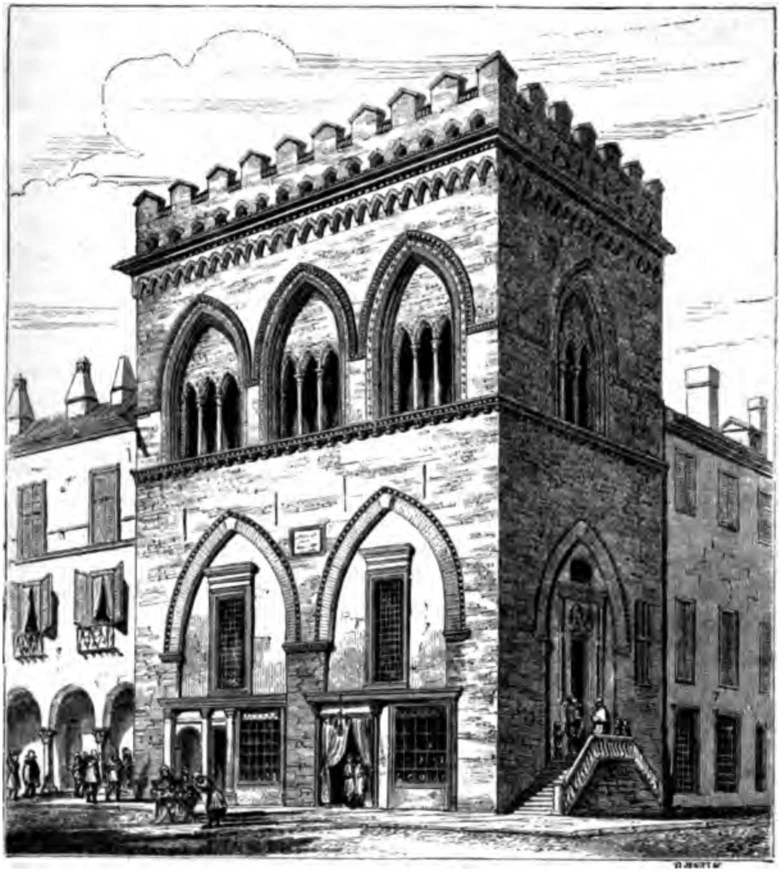
The free towns of Italy required civic buildings almost to the same extent as the contemporary cities in Belgium, though not quite of the same class. Their commerce, for instance, did not require trade halls, but no town was without its town-hall, or *palazzo pubblico*, and belfry. The intrinsic difficulty of the designing of buildings of this class, as compared with churches, has already been pointed out. It cannot therefore be expected that the Italians, who failed in the easier task, should have succeeded in the harder. The town-hall at Siena is perhaps the best existing example, most of the others having been so altered that it is difficult to judge of their original effect. This must be pronounced to be a very poor architectural performance, flat and unmeaning, and without any lines or style of ornament to group the windows together into one composition, so that they are mere scattered openings in the wall.

That at Perugia seems originally to have been better, though now greatly disfigured. At Florence the Palazzo Vecchio is more of a feudal fortalice (required, it must be confessed, to keep the turbulent citizens in order) than the municipal palace of a peaceful community. In Ferrara and other cities the *palazzo pubblico* is really and virtually a fortress and nothing else.

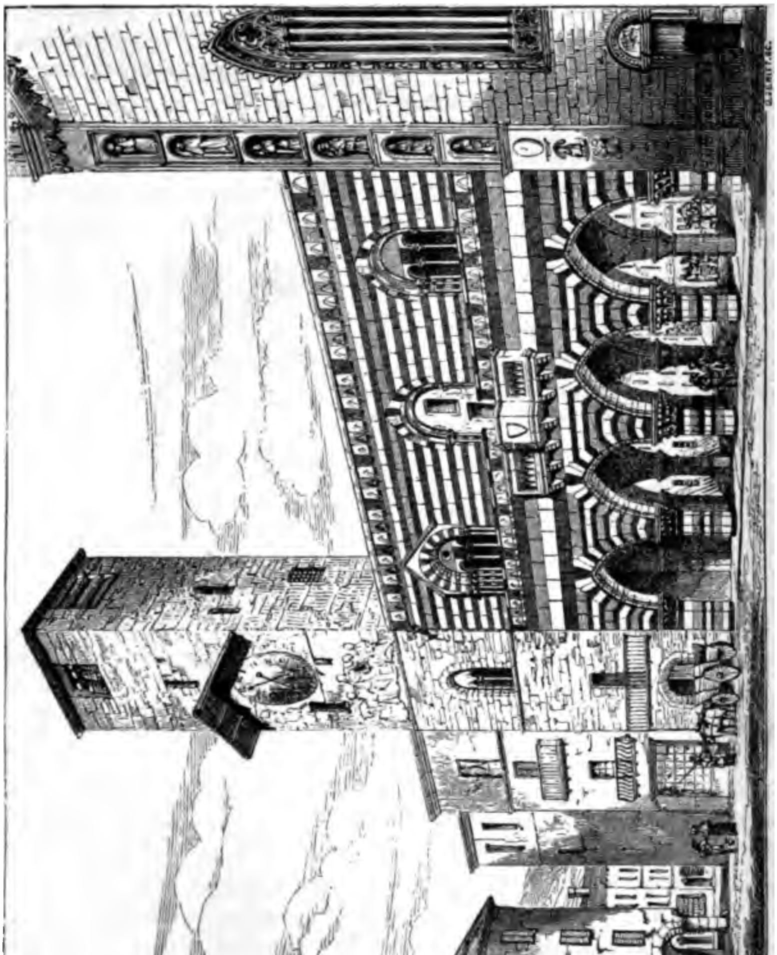
At Piacenza it consists of a range of bold pointed stone arches, supporting an upper storey of brick, adorned with a range of circular-headed windows, richly ornamented, and a pleasing specimen of the mode in which the Italians avoided the difficulty of filling the upper parts of their windows with tracery (which they never liked), and at the same time rendered them ornamental externally.

At Padua and Vicenza are two great halls supported on arcades, in intention like that of Piacenza, but far from possessing its beauty. That at Padua remains in all its pristine ugliness, as hideous an erection as any perpetrated in the Middle Ages. The hall is one of the largest in Europe, measuring 240 ft. in length by 84 in width (Westminster Hall is 238 × 67), but wholly without ornament or beauty of proportion. Externally the arcades that are stuck to its sides do not relieve its mass, and are not beautiful in themselves. That at Vicenza, though originally very similar, has been fortunate in having its outside clothed in one of Palladio's most successful designs,—perhaps the only instance in which an addition of that age and style has improved a building of the Gothic period. Comparing this hall as it stands with that at Padua, it must be admitted that the Italians were perfectly correct in abandoning *their* Gothic for the revived classical style, the improvement being apparent on the most cursory inspection.

A number of the town-halls or Brolettos in the smaller towns still remain unaltered, or nearly so, and retain all the peculiarities of their original design. The Palace of the Jurisconsults at Cremona for instance (Woodcut No. 786) only requires its lower arcades to be again opened to present all its original features, which resemble in almost every respect those of the palazzo at Piacenza above mentioned, except that the latter has five arches below and six windows above, instead of two and three as here shown. This


786. Palace of the Jurisconsults at Cremona. (From Street.)

building is wholly of brick, like most other civic buildings in the North of Italy. Sometimes, as at Piacenza, they are of stone below and brick in the upper storeys. Sometimes, though rarely, they are entirely faced with party-coloured marbles like the Broletto at Como (Woodcut No. 787), which, though not extensive, is a very beautiful specimen of the best form of civic architecture of the best age in the North of Italy, and standing as it does between the cathedral on the

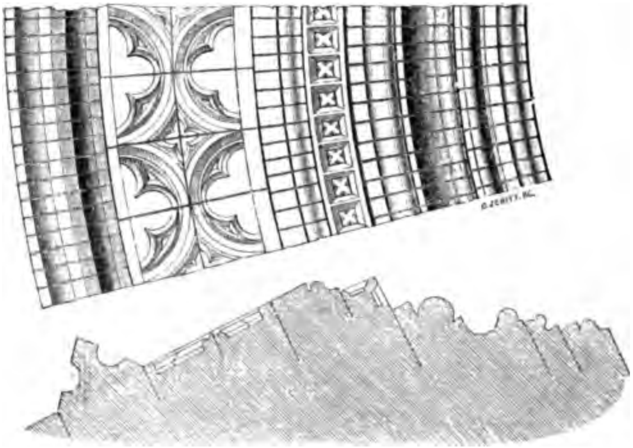


787. Broletto at Como. (From Street.)

one hand and its own rude old belfry on the other, makes up an extremely pleasing group.[1]

One of the most important buildings of this style is the Great Hospital, Milan. It was founded in the year 1456, and consequently belongs to an age when the style was dying out. It still retains more of the pointed style and of Gothic feeling than could have been found in any city farther south, or in any one less impregnated, as it were, with German blood and feeling.

Almost all the windows in the part originally erected are pointed in form and divided by mullions. Their principal ornament consists of garlands of flowers interspersed with busts and masks and figures of Cupids, which surround the windows, or run along the string-courses.



788. Ornamental Brickwork from the Broletto at Brescia. (From Street.)

The whole of these are in terra-cotta, and make up a style of ornamentation as original as it is beautiful. It is besides purely local, and far superior to the best copies of Northern details, or to the misapplied forms of Gothic architecture which are so common in Italy.

There is perhaps nothing in the North of Italy so worthy of admiration and study, as the way in which moulded bricks of various kinds are used for decoration, especially in the civic buildings, and also occasionally in the churches. Sublimity is not perhaps to be attained in brickwork; the parts are too small; and if splendour is aimed at, it may require some larger and more costly material to produce the desired effect; but there is no beauty of detail or of design on a small scale that may not be obtained by the use of moulded bricks, which are in themselves far more durable, and, if carefully burnt, retain their sharpness of outline longer, than most kinds of stone.

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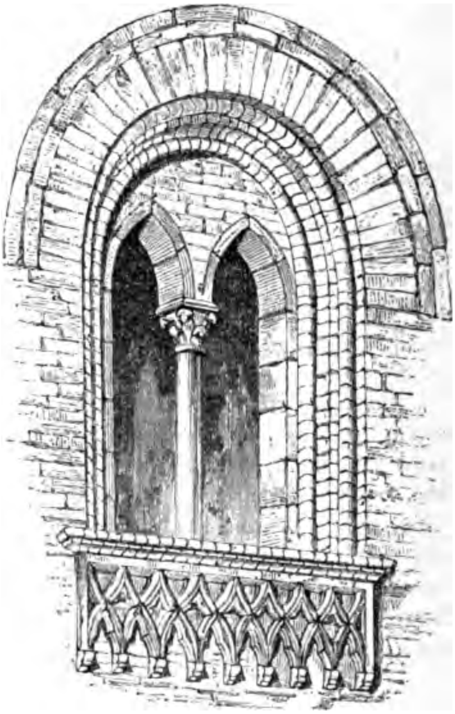
[1] Similar buildings at Bergamo, Brescia, and Monza are illustrated in Mr. Street's beautiful work on the architecture of the North of Italy, from which the two last illustrations are borrowed.

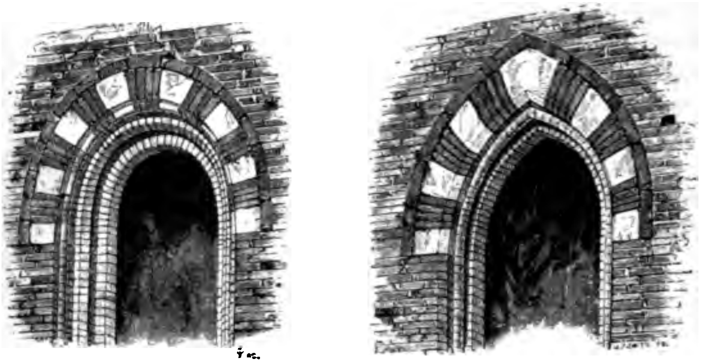
The most common way in which the Italians used this material was by repeating around their openings or along their cornices small copies of Gothic details, as in this example from a circular window in the Broletto at Brescia (Woodcut No. 788). Where the details are small and designed with taste, the effect is almost equal to stone; but where the details are themselves on a large scale, as is sometimes the case, the smallness of the materials becomes apparent. Even in this example the semi-quatrefoils of the principal band are too large for the other details, though not sufficiently so to be offensive.

Though not so rich, the effect is almost equally pleasing where the brick is merely moulded on its edge, without any very direct repetition of Gothic details, as in the upper part of the window shown in Woodcut No. 789, from the cathedral of Monza. Where great depth is given so as to obtain shadow, and long tiles are used for the upper arch, as was done by the Romans, an appearance of strength and solidity is given to the construction unsurpassed by that obtained in any other material.


789. Window from the Cathedral of Monza. (From Street.)

Perhaps the most pleasing application of terra-cotta ornaments is where bricks of different colours are used so as to produce by variety of pattern that relief which cannot so well be given by depth of shadow—a perfectly legitimate mode of ornament when so small a material is used, and when beauty only, not sublimity, is aimed at.

This is sometimes produced in Italy by introducing stone of a different colour among the bricks, as in the two examples from Verona (Woodcuts Nos. 790, 791); and where this mode of ornamentation is carried throughout the building, the effect is very pleasing. It is difficult, however, so to proportion the two materials as to produce exactly the effect aimed at, and seldom that the objection does not present itself of too much or too little stone being used. The want of shadow in brick architecture is most felt in the cornices, where sufficient projection cannot be obtained. The defect might be easily and legitimately got over by the employment of stone in the upper members of the cornice, but this expedient seems never to have been resorted to.



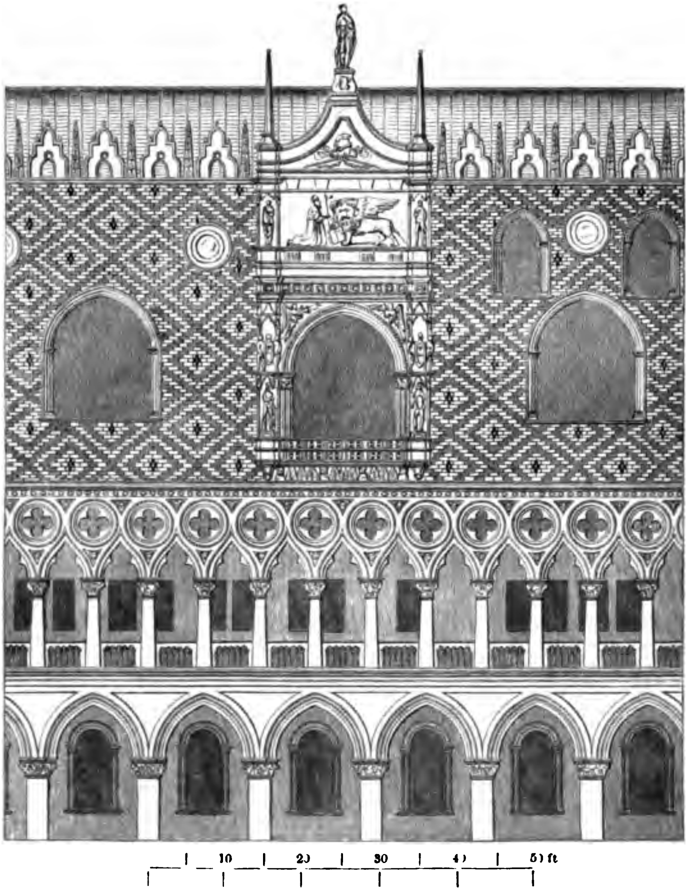
790. Windows from Verona. (From Street.) 791.

There are few of these brick buildings of the North of Italy which are not open to just criticism for defects of design or detail, but this may arise from the circumstance that they all belong to an age when the Italians were using a style which was not their own, and employing ornaments of which they understood neither the origin nor the application. The defects certainly do not appear to be at all inherent in the material, and, judging from the experience of the Italians, were we to make the attempt in a proper spirit, we might create with it a style far surpassing anything we now practise.

VENICE.

The most beautiful specimens of the civil and domestic architecture of Italy in the Gothic period are probably to be found in Venice, the richest and most peaceful of Italian cities during the Middle Ages. It is necessary to speak of the buildings of Venice, or more correctly, of the Venetian Province, by themselves, since its architecture is quite distinct both in origin and character from any other found in Northern Italy. It was not derived from the old Lombard Round Gothic, but from the richer and more graceful Byzantine. True to its parentage, it partook in after ages far more of the Southern Saracenic style than of the Northern Gothic; still it cannot be classed as either Byzantine or Saracenic, but only as Gothic treated with an Eastern feeling, and enriched with many details borrowed from Eastern styles.

The largest and most prominent civic example of Venetian Gothic is the Doge's Palace, commenced in 1354 (Woodcut No. 792), a building which all the world agreed till very lately in thinking very ugly, though an attempt has recently been made to exalt it above the Parthenon, and all that was great and beautiful in Greece, Egypt, or Gothic Europe. There are indeed few buildings of which it is so difficult to judge calmly, situated as it is, attached to the basilica of St. Mark, facing the beautiful library of Sansovino, and looking on the one hand into the piazza of St. Mark's, and on the other across the water to the churches and palaces that cover the islands. It is, in fact, the centre of the most beautiful architectural group that adorns any city of Europe, or of the world—richer than almost any other building in historical associations, and in a locality hallowed, especially to an Englishman, by the poetry of Shakespeare. All this



792. Central Part of the Façade of the Doge's Palace, Venice. (From Cicognara.)

spreads a halo around and over the building, which may furnish ample excuse for those who blindly praise even its deformities. But the soberer judgment of the critic must not be led astray by such feelings, and while giving credit for the picturesque situation of this building and a certain grandeur in its design, he is compelled wholly to condemn its execution. The two arcades which constitute the base are, from their extent and the beauty of their details, as fine as anything of their class executed during the Middle Ages. There is also a just and pleasing proportion between the simple solidity of the lower, and the airy—perhaps slightly fantastic—lightness of the upper of these arcades. Had what appears to have been the original design been carried out, the building would rank high with the Alhambra and the palaces of Persia and India; but in an evil hour, in 1480, it was discovered that larger rooms were required than had been originally contemplated, and the upper wall, which was intended to stand on the back wall of the arcades, was brought forward level with the front, overpowering the part below by its ill-proportioned mass.[1] This upper storey too is far from being beautiful in itself. The windows in it are not only far too few, but they are badly spaced, squat, and ungraceful; while the introduction of smaller windows and circles mars its pretensions to simplicity without relieving its plainness. Its principal ornaments are two great windows, one in the centre of each face, which appear to have assumed their present form after the fire in 1578. These are not graceful objects in themselves, and having nothing in common with the others, they look too like insertions to produce an entirely satisfactory effect. The pierced parapet, too, is poor and flimsy when seen against the sky. Had it crowned the upper arcade, and been backed by the third storey, it would have been as pleasing as it is now poor. Had the upper storey been set back, as was probably originally designed, or had it been placed on the ground and the arcades over it; had, in short, any arrangement of the parts been adopted but the one that exists, this might have been a far more beautiful building than it is. One thing in this palace is worth remarking before leaving it—that almost all the beauty ascribed to its upper storey arises from the polychromatic mode of decoration introduced by disposing pieces of different coloured marbles in diaper patterns. This is better done here than in Florence; inasmuch as the slabs are built in, not stuck on. The admiration which it excites is one more testimony to the fact that when a building is coloured, ninety-nine people in a hundred are willing to overlook all its faults, and to extol that as beautiful, which without the adjunct of colour they would have unanimously agreed in condemning.

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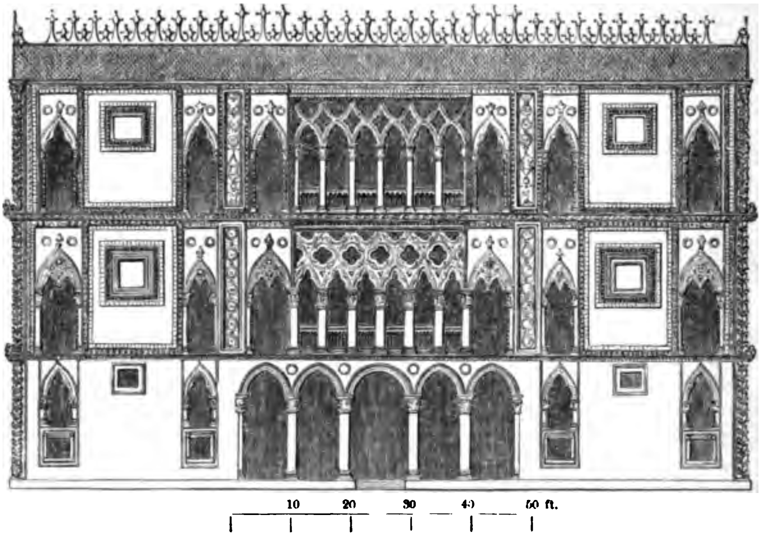
[1] In the Bodleian in Oxford is a MS. of the 14th century containing a view of the Piazzetta, engraved in Yule's 'Marco Polo,' Introduction, p. xlviii., which in itself is quite sufficient to set the question at rest. In it the outer wall of the building is shown resting on the inner wall of the arcade.

A better specimen of the style, because erected as designed, and remaining nearly as erected, is the Cà d'Oro (Woodcut No. 793), built about 1350, or nearly contemporary with the ducal palace. It has no trace of the high roofs or aspiring tendencies of the Northern buildings of the same age, no boldly-marked buttresses in strong vertical lines, but, on the contrary, flat sky-lines and horizontal divisions pervade the design, and every part is ornamented with a fanciful richness far more characteristic of the luxurious refinement of the East than of the manlier appreciation of the higher qualities of art which distinguished the contemporary erections on this side of the Alps.

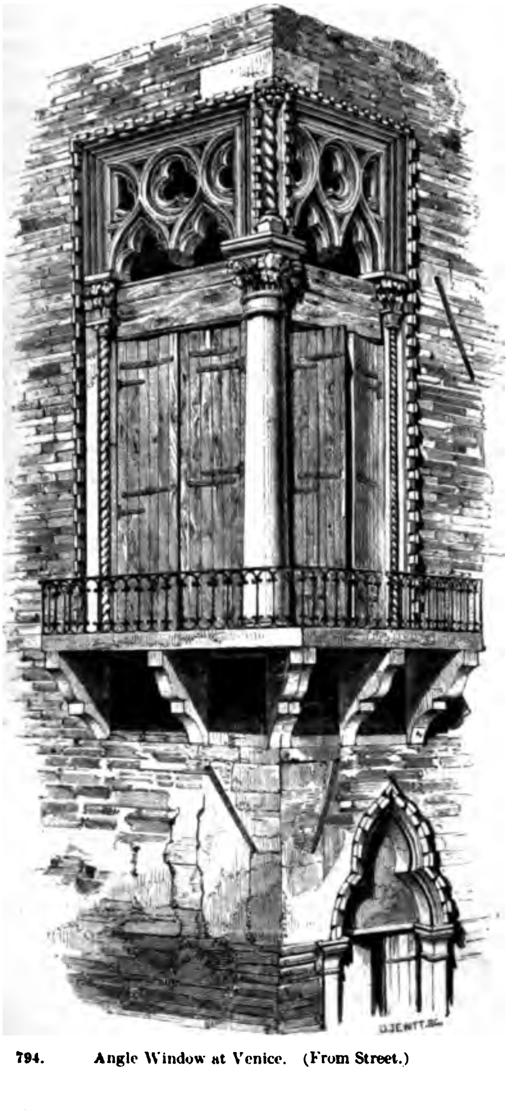


793. Cà d'Oro, Venice. (From Cicognara.)

The palaces known as the Foscari and Pisani are very similar in design to that of Cà d'Oro, though less rich and less happy in the distribution of the parts; but time has restored to them that colour which was an inherent part of the older design, and they are so beautiful and so interesting that it is hard to criticise even their too apparent defects as works of art. Most of the faults that strike us in the buildings of Venice arise from the defective knowledge which they betray of constructive principles. The Venetian architects had not been brought up in the hard school of practical experience, nor thoroughly grounded in construction, as the Northern architects were by the necessities of the large buildings which they erected. On the contrary, they merely adopted details because they were pretty, and used them so as to be picturesque in domestic edifices, where convenience was everything, and construction but a secondary consideration. For instance, the window here shown (Woodcut No. 794) cannot fail to give the building in which it occurs an appearance of weakness and insecurity quite inexcusable in spite of its external picturesqueness or its internal convenience.

The same remark applies to the screen (Woodcut No. 795) above the Ponte del Paradiso, which, though useless and unconstructive to the last degree, by its picturesque design and elegant details arrests all travellers. Indeed it is impossible to see it without admiring it, though, if imitated elsewhere, it could hardly be saved from being ridiculous.

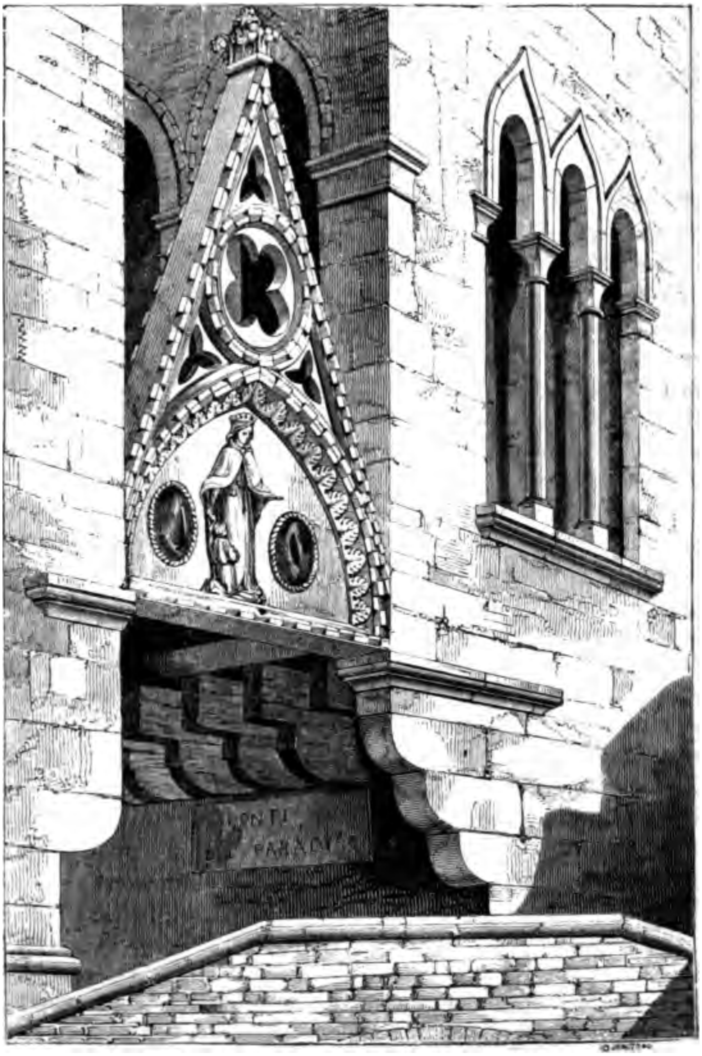
Both these examples are surrounded by a curious dental moulding which is peculiar to Venice, and which, though rarely found elsewhere, is hardly ever omitted round any of the arches of the churches or private buildings of this city during the pointed Gothic period.



794. Angle Window at Venice. (From Street.)

There are, besides these, many smaller palaces and houses of the Gothic age, all more or less beautiful, and all presenting some detail or some happy arrangement well worthy of study, and usually more refined and more beautiful than those of the rude but picturesque dwellings of the burghers of Bruges or Nuremberg.

The mixed Gothic style which we have been describing appears to have exerted a considerable effect on the subsequent palatial architecture of Venice, even after classical details had become generally fashionable. The arrangement of the façades remained nearly the same down to a very late period; and even when the so called return to classical forms took place, many details of the previous style were here retained, which was not the case in any other part of Europe.



795. Ponte del Paradiso, Venice. (From Street.)

CHAPTER V.

BYZANTINE ROMANESQUE STYLE OF MEDIÆVAL ITALY.

CONTENTS.

Introductory Classification of Styles.

It would be easier to define the limits and character of the remaining styles of Italian Mediæval architecture by a negative than a positive title. To call them the "non-Gothic" styles would describe them correctly, but would hardly suffice to convey a distinct idea of their peculiarities. Romanesque, or even Italian Romanesque, would not be sufficient; first, because that term applies only correctly to those transitional forms which were derived directly from the Roman styles as they became impure and degraded, and has already been applied to them in a previous chapter: and, secondly, because there is an important foreign element in the styles in question of which that name takes no cognizance. That element is the Byzantine, derived partly from the continued relations which such cities as Venice or Pisa maintained during the Middle Ages with the Levant, and partly from the intercourse which the inhabitants of Magna Grecia kept up across the Adriatic with the people on its eastern shore. To such a mixture of styles the term "Byzantine Romanesque" is perfectly appropriate; but there is still in Italy another form of art which cannot be included in such a denomination. The typical example of this style is the church of St. Mark at Venice.

St. Mark's is generally assumed to be purely Byzantine; but there is no church in the East exactly like it, though many possess features in common; and there are in Apulia churches, such as Molfetta and St. Angelo, which look much more like Levantine designs than anything to be found in other parts of Europe, except perhaps such buildings as St. Front, Perigeux, and one or two exceptional buildings in the South of France. To this style, as practised in Italy, it may be expedient to give the name "Italian Byzantine."

There still remains the difficulty of knowing under which of these two branches some of the buildings of Southern Italy should be classed. The cathedrals of Bari, Bitonto, Trani, and Caserta Vecchia, may as fairly be said to belong to one as to the other style. In a very detailed description of Italian styles it might be expedient to attempt a further subdivision, and to follow up the two divisions just marked out by two others, the one to be designated "Romanesque Gothic," to include such churches as the two at Toscanella; and the other "Byzantine Gothic," to include those churches in the South in the decoration of which rose-windows and Gothic details form a leading characteristic. For the present, however, it will probably suffice to describe the various non-Gothic styles of the southern half of Italy in local sections, without attempting any very minute classification of their variations. As the Italians had no great national style of their own, and both in the North and South were principally working under foreign influences, it is in vain to look for any thread that will conduct the student straight through the labyrinth of their styles. Italian unity is the aspiration of the present century: during the Middle Ages it did not exist either in politics or art.

CHAPTER VI.

BYZANTINE ROMANESQUE.

CONTENTS.

Buildings in Naples, Amalfi, &c.—San Nicolo, Bari—Cathedrals of Bittonto, Matera, and Trani — Churches at Brindisi — General Remarks.

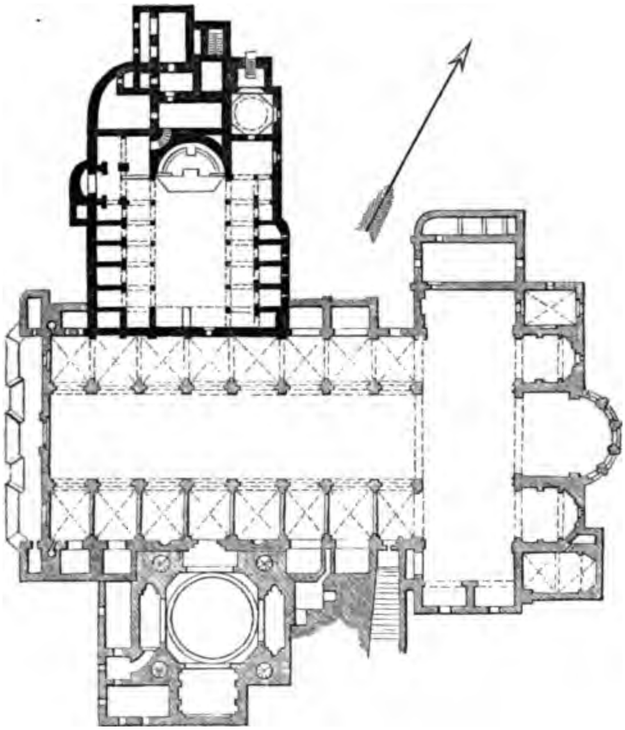
CHRONOLOGY.

	DATES.		DATES.
The Normans enter Italy	A.D. 1018	William II., surnamed the Good	A.D. 1166
—— conquer Apulia from the Greeks	1043	Tancred	1189
—— attack the Saracens in Sicily	1061	Frederic Hohenstaufen of Germany	1197
Conquest of Sicily completed by Roger de Hauteville	1090	Conrad	1250
		Conradin	1254
Roger II.	1101	Charles I., first Angiovine King of Naples	1266
William I., surnamed the Wicked	1153	René, last Angiovine King of Naples	1435

ALTHOUGH Naples is in the very centre of its province, where we naturally first look for examples of the style, there are few cities in Italy which contain so little to interest the architect or the antiquary. Still she does possess one group of churches, which, by their juxtaposition, at least serve to illustrate the progress of the style during the Middle Ages. The earliest of these, Sta. Restituta—shaded dark in the plan (Woodcut No. 796)—may be as old as the 4th or 5th century, and retains its original plan and arrangement, though much disfigured in details. The baptistery, a little behind the apse on its left, is certainly of the date indicated, and retains its mosaics, which seem to be of the same age.

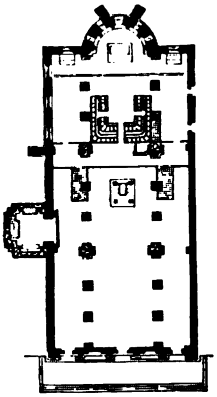
In the year 1299 Charles II. of Anjou commenced the new cathedral at right angles with the old, his French prejudices being apparently shocked at the incorrect orientation of the older church. It is a spacious building, 300 ft. long, arranged, as Italian churches usually were at that age, with a wooden roof over the nave and intersecting vaults over the side-aisles. Opposite the entrance of the old cathedral is a domical chapel of Renaissance design, so that the group contains an illustration of each of the three ages of Italian art.

The church of San Miniato (Woodcuts Nos. 797 and 798), on a hill overlooking Florence, is one of the earliest (1013) as well as one of the most perfect, of the Byzantine Romanesque style. Internally it is only [illegible]65 ft. in length by 70 in width, divided longitudinally into aisles, and [illegible]versely into three nearly square compartments by clustered piers



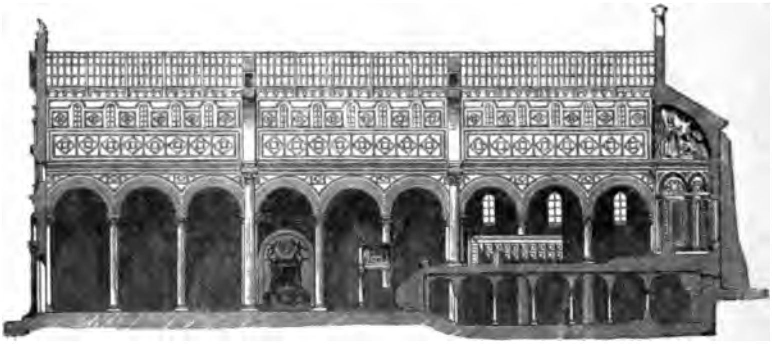
796. The Old and New Cathedrals at Naples. (From Schultz.) Scale 100 ft. to 1 in.

supporting two great arches which run up to the roof. The whole of the inner compartment is occupied by a crypt or under-church open to the nave, above which is the choir and altar-niche, approached by flights of steps in the aisles. The entire arrangement, together with the division of the nave into three compartments, is most satisfactory, and the proportions of the whole are very appropriate. The pillars themselves are so nearly classical in design that they were probably taken from some ancient building, and the architraves and stringcourses are all well designed and fitted to the places they occupy. The principal ornament of the interior is an inlaid pattern of simple design, sufficient to relieve the monotony of the interior, but without producing any confusion. The exterior depends principally, like the interior, for its effect on coloured panelling, but has a range of blind arches running round the sides and across the front. The façade, however,



797. Plan of San Miniato, Florence. (From Gailhabaud's 'Monuments Anciens et Modernes.') Scale 100 ft. to 1 in.

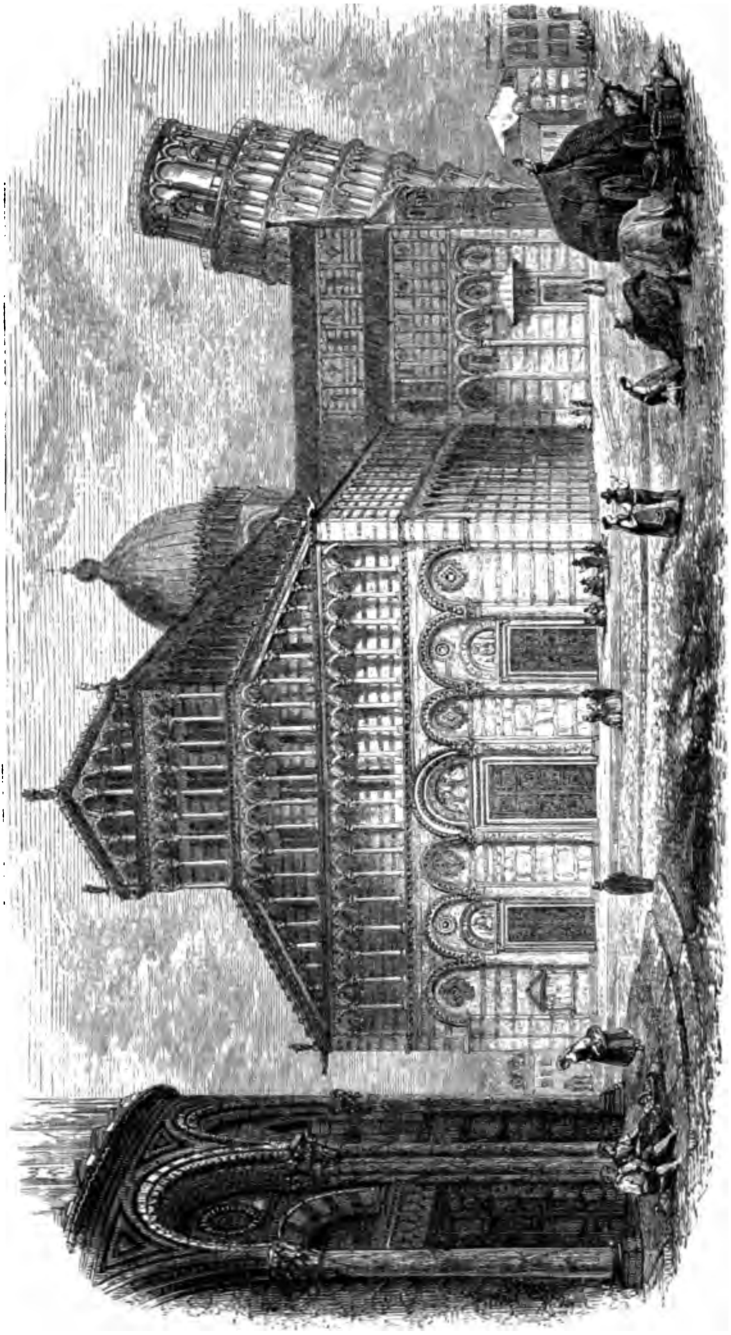
is very badly designed; either it was one of the earliest examples, and the architects had not learned how to combine the sloping roofs of the aisles with the upper part of the façades, or it has been altered in more modern times; but for this slight defect it would be difficult to find a church in Italy containing more of classic elegance, with perfect appropriateness for the purposes of Christian worship.



798. Section of San Miniato, near Florence. (From Gailhabaud.) Scale 50 ft. to 1 in.

There must have been several, probably many, buildings in the same style erected in Tuscany during the first half of the 11th century. Otherwise it is almost impossible to understand how so complete a design as that of Pisa Cathedral could have been executed. It was commenced apparently in 1063, and completed in 1092. Internally its design is evidently based on that of the basilicas of Rome and Ravenna, except that instead of the range at the latter place of figures in mosaic, it has a splendid triforium gallery and in plan strongly marked projecting transepts. Its great merit, however, as a design arises from the fact that the builders had learned to proportion the parts to one another so as to get greater magnificence with very much smaller dimensions. The size, for instance, of the nave of San Paolo fuori le Mure at Rome is 290 ft. by 215; these dimensions are nearly double those at Pisa, where they are 173 ft. by 106. Yet, in consequence of the greater relative height of the nave and the better spacing of the pillars and proportion of the parts, the interior of Pisa is more pleasing and more impressive than the Roman church. Its effect too is immensely increased by the truly Mediæval projection of the transepts. In no church in Italy is there such poetry of perspective as in looking anglewise across the intersection, and seldom anywhere a more satisfactory interior than that of this church.

The exterior too is almost equally pleasing. The side-aisles are adorned with a range of blind arches running all round, adorned with party-coloured marble, inlaid either in courses or in patterns. Above this is a gallery, representing the triforium, carried all round, and in

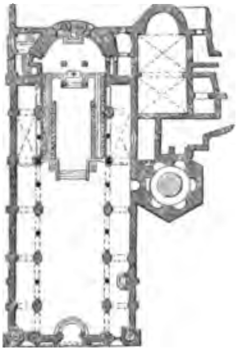


799. View of the Cathedral at Pisa. (From Chapuy's 'Moyen-Age Monumental.')

the façades formed into an open gallery; a second open gallery represents the sloping roof of the aisles, a third the clerestory, a fourth the slopes of the great roof. The difficulty here, as in almost all Italian designs, is caused by the sloping roofs; but, with this exception, the whole makes up a rich and varied composition without any glaring false construction, and expresses with sufficient clearness the arrangements of the interior. The dome is of later design, and, being oval in plan, cannot be said to be pleasing in outline.

The Italians were evidently delighted with their new style. It was repeated with very little variation at Lucca, in the church of San Michele (1188), only that the arcades stood free on the sides as well as on the front. The façade of San Martino, in the same city, is in the same style; so is that of the cathedral at Pistoja, and so is Sta. Maria at Arezzo. The arrangement was probably suggested by the porticoes of Pagan temples, and were it not for the awkwardness caused by the sloping line of the roofs, it might be characterised as one of the most successful inventions of the age.

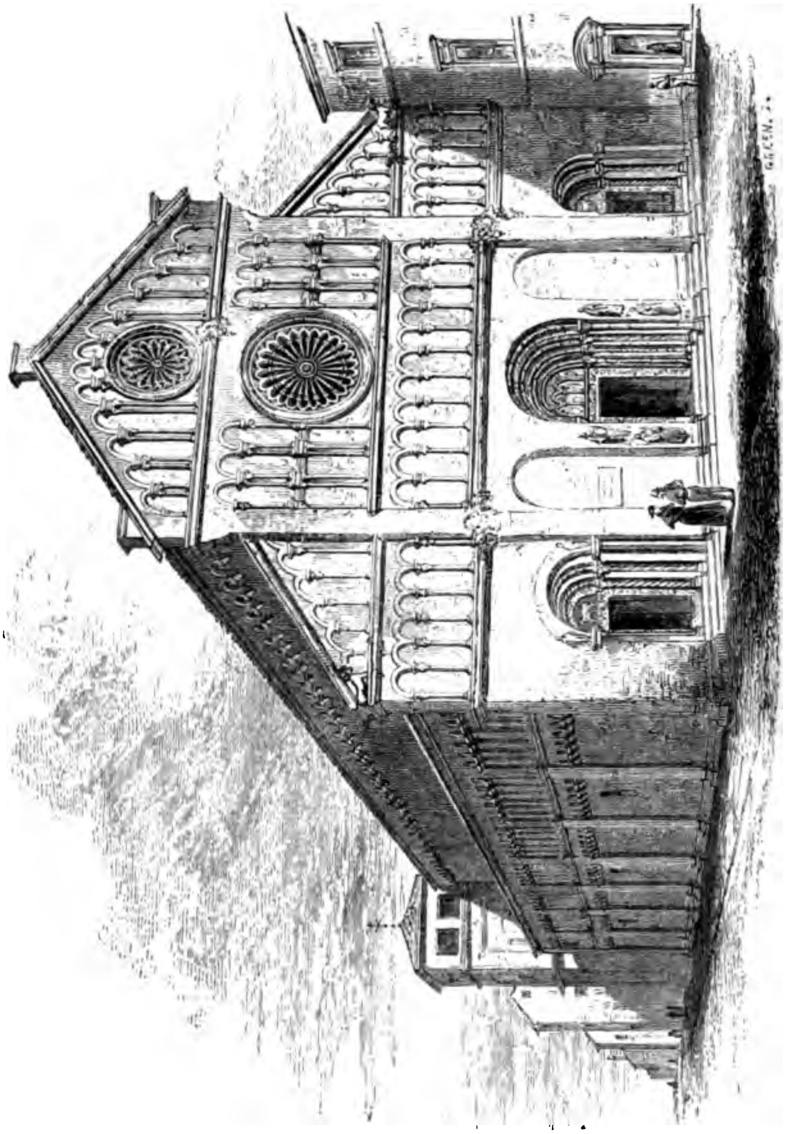
In some instances, as in the façade of the Cathedral at Zara in Dalmatia (Woodcuts Nos. 800, 801), built by Enrico Dandolo (1192-1204), the difficulties of the design of the façade are to a great extent conquered by reducing the arcades to mere decorative panelling, and more than this by separating the design of the centre from that of the aisles by a bold square pilaster. This is exactly the feature we miss at Pisa and Lucca, where the want of it imparts a considerable degree of weakness to the whole design.


800. Plan of Zara Cathedral.
Scale 100 ft. to 1 in.

The plan of the Zara Cathedral is that usually adopted in churches of this class; but it possesses a lady chapel and baptistery, placed laterally in a somewhat unusual manner. Its dimensions are small, being only 170 ft. by 65 externally.

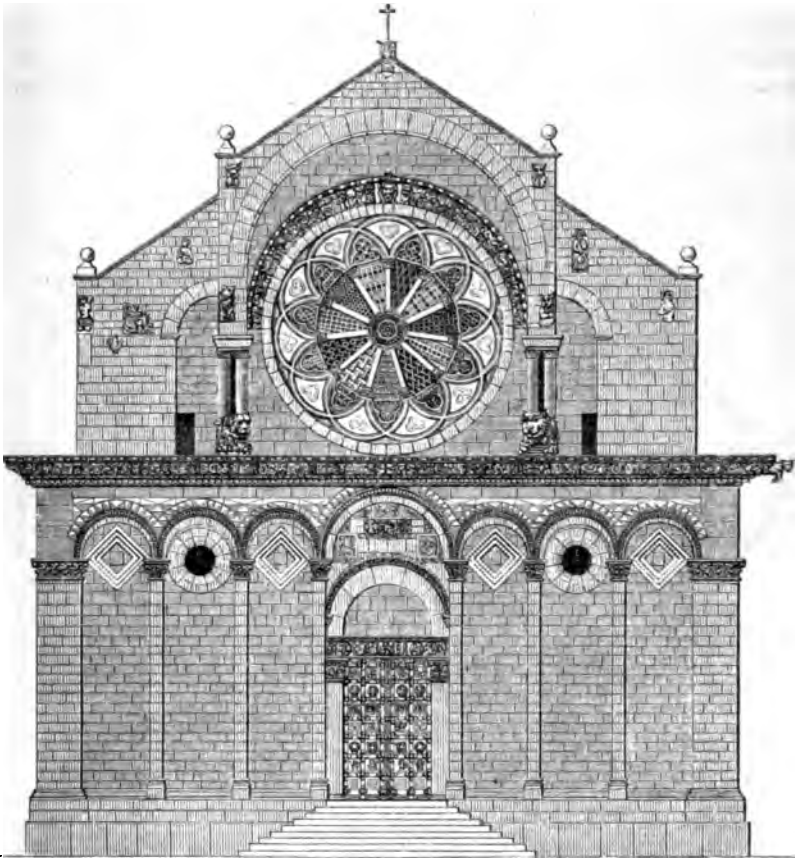
The east end of this church, its doorways and windows, show, as might be expected from its locality, a greater tendency towards Gothic art than can be found on the western shores of the Peninsula, but in internal arrangements it belongs wholly to the Italian style.

Further south on the mainland of Italy, at Troja, we find a singularly elegant cathedral church (1093-1115?) in the same style (Woodcut No. 802). Its flanks and apse are perhaps even more elegant than anything in the neighbourhood of Pisa. So is the lower part of its façade, which is adorned with a richness and elegance of foliage characteristic of the province where it is found; and the cornice that crowns the lower storey is perhaps unmatched by any similar example to be found in Italy, either for beauty of sculptural decoration or for appropriateness of profile. The upper part of the façade differs, however, considerably from that of the examples just quoted. A great

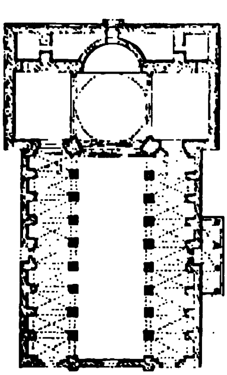


108. View of Zara Cathedral. (From Sir Gardner Wilkinson's 'Dalmatia and Montenegro.')

rose-window, of elegant but ill-understood tracery, takes the place of the arcades, and, with the sculptured arch over it, completes all that remains of the original design. The plain pieces of walling that support the central window are parts of a modern repair.



802. Façade of Cathedral at Troja. (From Schultz.[1]) No scale.



803. Cathedral at Bari. Scale 100 ft. to 1 in.

As a general rule, all the churches in the South of Italy are small. This one at Troja is arranged in plan like that at Pisa, with bold projecting transepts, but its length is only 167 ft., and the width of its nave 50, while in the northern cathedral these dimensions are nearly double, 310 ft. by 106, and the area four times as great. This is true of all, however elegant they may be—they are parish churches in dimensions as compared with their Northern rivals.

Many also, as the cathedral at Bari (Woodcut No. 803), have their apses internal, which detracts very much from the meaning of the design, and does away with the apsidal terminations, which are perhaps the most beautiful features in the external design of Italian churches; while they lack the great traceried windows which go so far to replace the absence of the apse in English design. The annexed elevation of the east end at Bari (Woodcut No. 804) gives a fair idea of the general arrangement of that part in the churches in Apulia. It is novel, and the two tall towers with a central dome, combine with elegant details to make up a whole which it is impossible not to admire, though it will not bear comparison with the more artistic arrangements of Northern architects.

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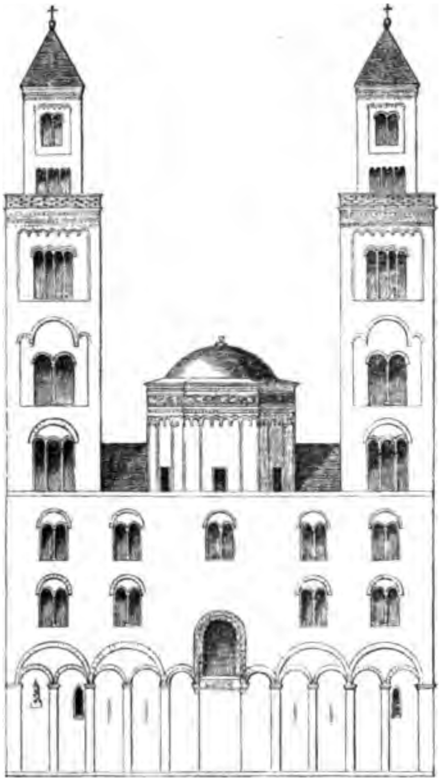
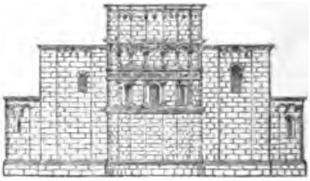
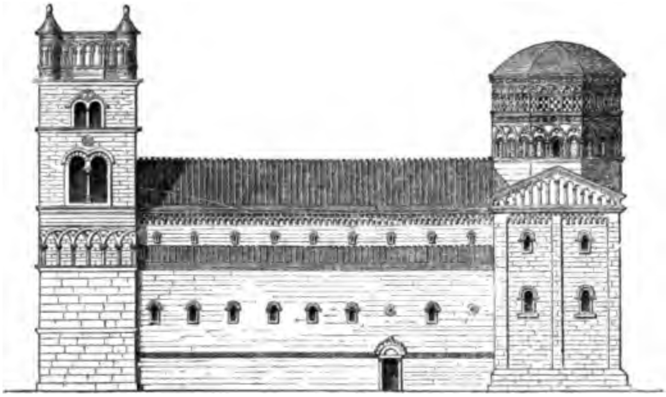
[1] [illegible]hultz, 'Denkmäler der Kunst der Mittelalters in Unter-Italien.' Folio, 1860.

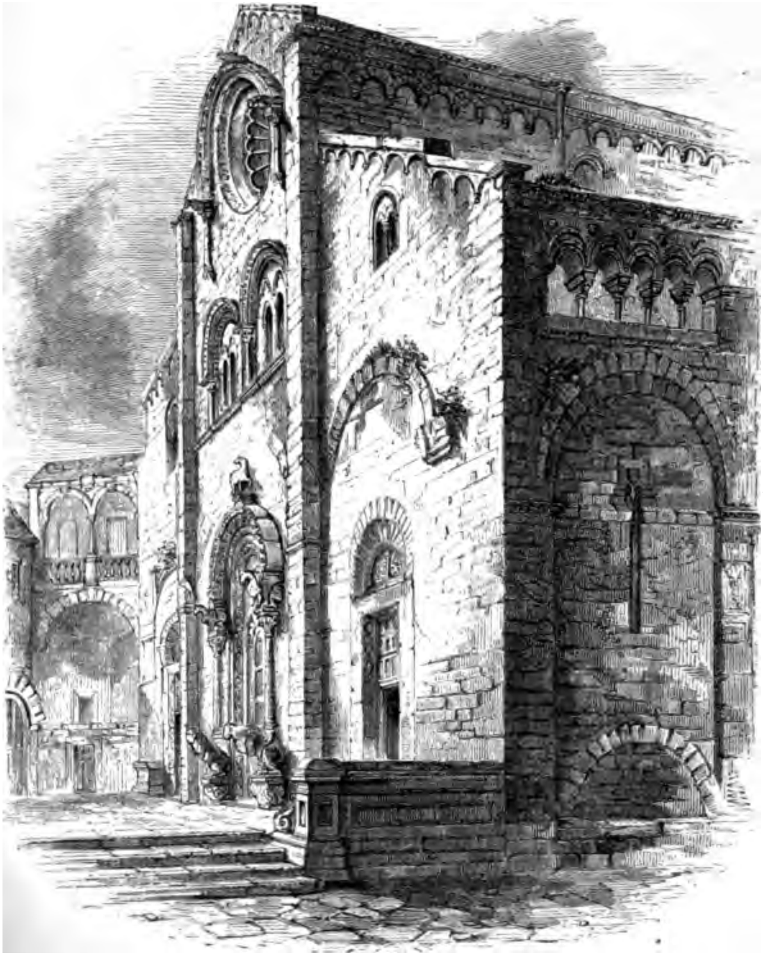

804. East End of Cathedral at Bari. (From Schultz.) Scale 50 ft. to 1 in.

Where the apse is allowed to be seen externally, it is sometimes, as at San Pellino (Woodcut No. 805), an object of great beauty and originality, but such examples are rare in the province, and the designs suffer in proportion.


805. Apse of San Pellino. (From Schultz.) Scale 50 ft. to 1 in.

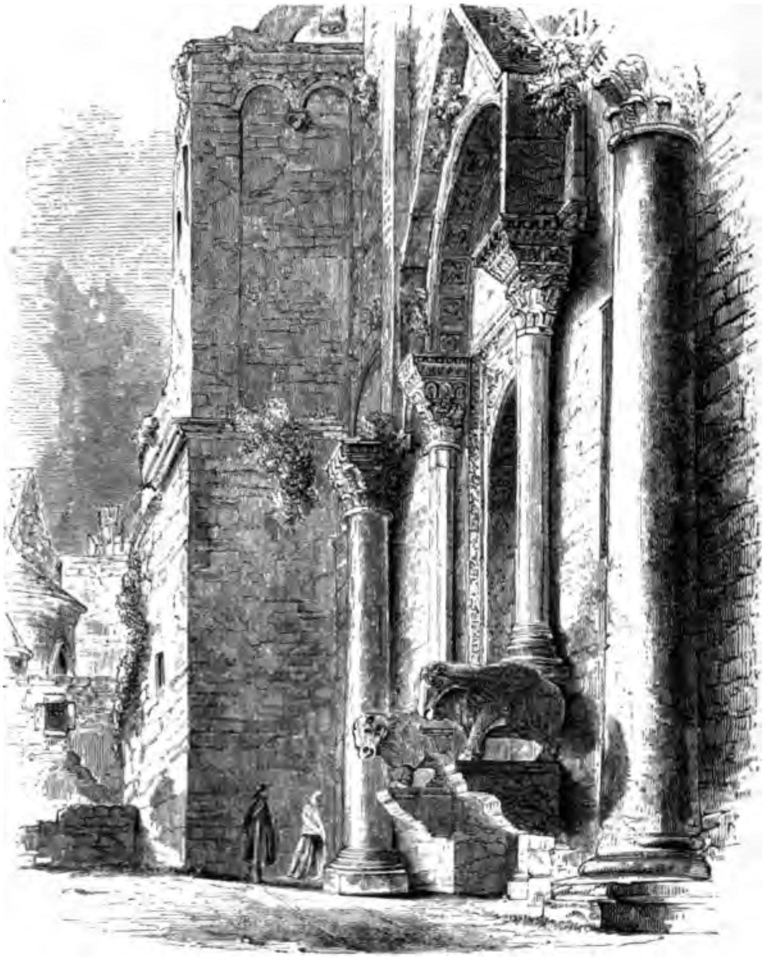

806. Church at Caserta Vecchia. (From Schultz.) Scale 50 ft. to 1 in.

In the richer churches, as at Pisa, a blind arcade is carried round the flanks, sometimes with an open gallery under the eaves, as in German churches, but this was far from being universally the case: on the contrary, it would be difficult, as a typical example of the style, to select one more characteristic than the flank of the church of Caserta Vecchia (1100–1153) (Woodcut No. 806). The windows are small but numerous, and mark the number of bays in the interior. The transept is slightly projected, and ornamented with an arcade at the top, and above this rises a dome such as is found only in Calabria or Sicily. The tower was added afterwards, and, though unsymme[illegible]al, assists in relieving a design which would otherwise run the risk [illegible] being monotonous.



807. West Front of Bittonto Cathedral. (From a Sketch by A. J. R. Gawen, Esq.)

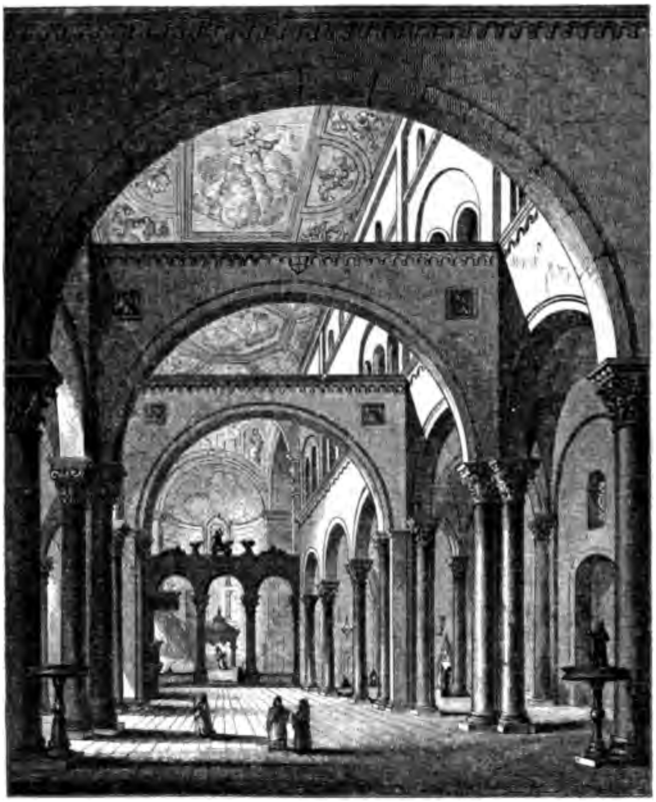
It was, however, on their entrance façades that the architects of Southern Italy lavished their utmost care. The central doorways are usually covered with rich hoods, supported by pillars resting on monsters somewhat like those found in the North of Italy. Above this is either a gallery or one or two windows, and the whole generally terminates in a circular rose-window filled with tracery. As exemplified in the front of Bittonto Cathedral (Woodcut No. 807), such a composition is not deficient in richness, though hardly pleasing as an architectural composition.



808. West Front of the Church of San Nicolo in Bari. (From a Sketch by A. J. R. Gawen, Esq.)

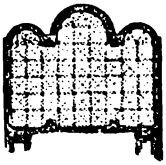
The same arrangement, on about the same scale, occurs at Bari, Altamura, and Ruvo; and on a somewhat smaller scale in the churches of Galatina, Brindisi, and Barletta. The great and peculiar beauty of the cathedral at Bittonto is its south front, one angle of which is shown in the woodcut; but which becomes richer towards the east, where it is adorned with a portal of great magnificence and beauty. The richness of its open gallery (under what was the roof of the side-aisles) is unsurpassed in Apulia, and probably by anything of the same kind in Italy.

The façade of San Nicolo at Bari (1197) is something like the last-mentioned, except that handsome Corinthian columns have been borrowed from some older building, and add to the richness of the design, though they hardly can be said to belong to the composition. Internally this church seems to have displayed some such arrangament as that of San Miniato (Woodcut No. 797). Instead, however, of improving upon it, as might be expected from the time that had elapsed since the previous one was erected, the Southern architect hardly knew the meaning of what he was attempting. He grouped together the three pillars next the entrance, and threw arches across the nave



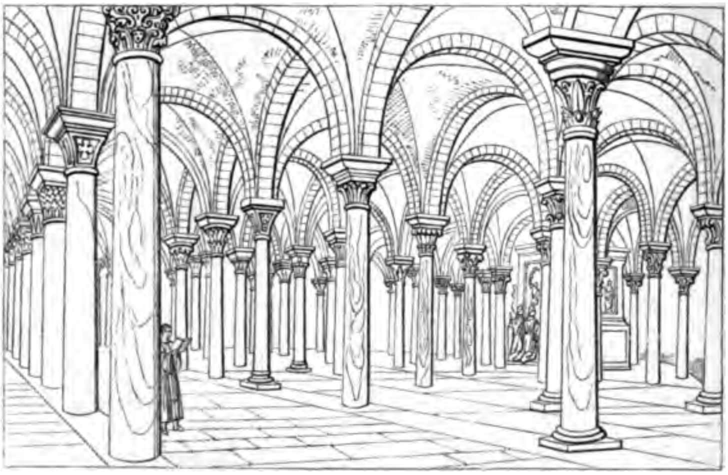
809. View of the Interior of San Nicolo, Bari. (From Schultz.)

from them, but these arches neither support the roof nor aid the construction in any other way. They do add to the perspective effect of the interior, but it is only by a theatrical contrivance very rare in the Middle Ages, and by no means to be admired when found.



810. Plan of Crypt at Otranto
Scale 100 ft. to 1 in.

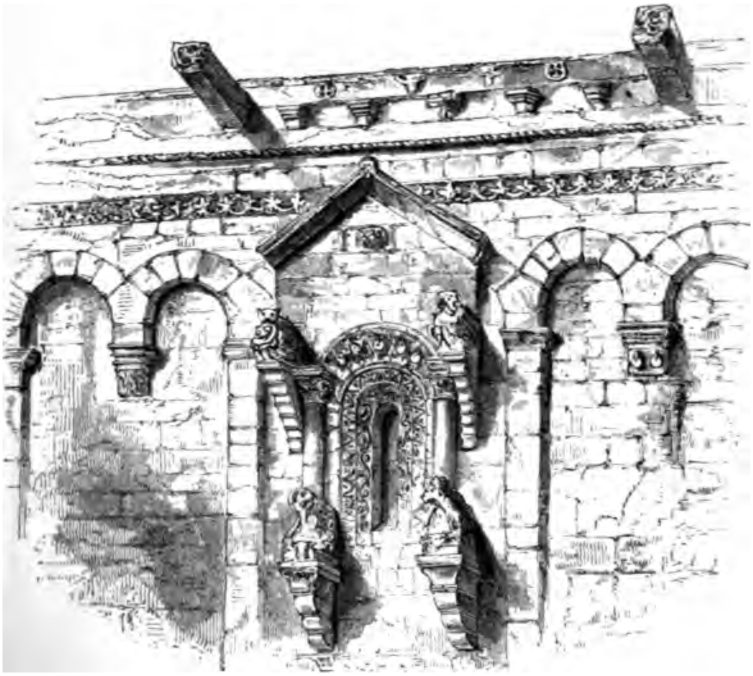
Most of these Apulian churches possess crypts almost as important as that of San Miniato, some more so; and the numerous pillars in some of these give rise to effects of perspective only to be found elsewhere in such buildings as the Mosque at Cordova, or the cisterns at Constantinople. As in the annexed example, from the cathedral at Otranto, it is wonderful what space and what variety may be attained with small dimensions by the employment of numerous points of support. This was the secret of most of the best effects produced by the Northern architects; but the Italians never understood it, or practised it, except in crypts. Perhaps it may have been that they thought it necessary to sacrifice architectural effect to the exigencies of public worship. Whether this were the cause or not, the result, as already pointed out, was fatal to the architectural effect of many of their designs, especially in the Northern province.



811. View in Crypt at Otranto. (From Schultz.)

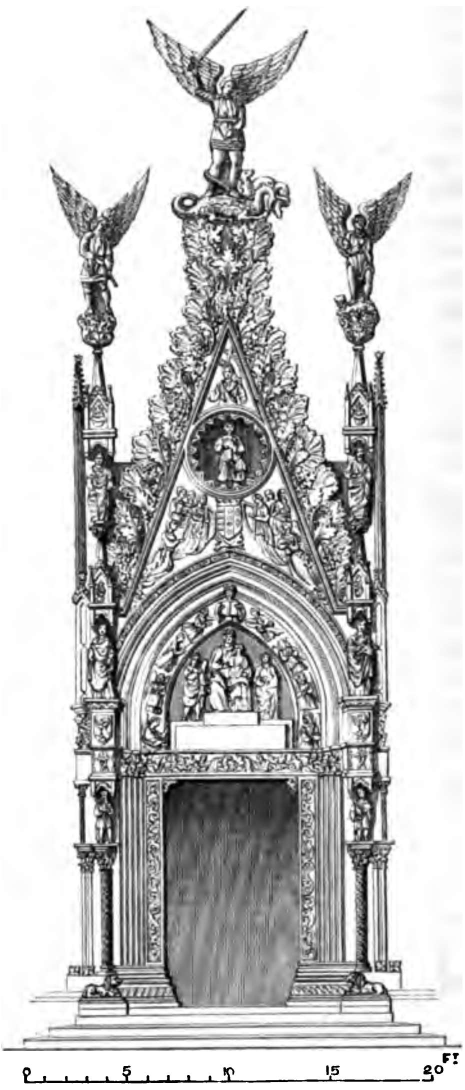
In Southern Italy this is seldom the case, but the difference arose from the fact that the naves of the churches had never vaulted roofs, and were consequently separated from the aisles by single pillars instead of composite piers. This took away all temptation to display mechanical dexterity, and left the architect free to produce the best artistic effect he was able to design with the materials at his command.

No one who takes the pains to familiarise himself with the architecture of these Southern Italian churches, can well fail to be impressed with their beauty. That beauty will be found, however, to arise not so much from the dimensions or arrangement of their plans, or the form of their outline, as from the grace and elegance of their details. Every feature displays the feeling of an elegant and refined people, who demanded decoration as a necessity, though they were incapable of rising to any great architectural conception. They excelled as ornamentists, though at best only indifferent architects.



812. Window in the South Side of the Cathedral Church in Matera. (From a Sketch by Mr. Gawen.)

It is impossible to render this evident in such a work as the present; but besides the examples already given, a window (Woodcut No. 812) from the cathedral church at Matera (1270), will explain how unlike the style of decoration is to anything with which we are familiar in the North, and at the same time how much picturesque effect may be produced by a repetition of similar details. The church itself has this peculiarity, that its west front is plain and unimportant, and that all the decoration is lavished on the south side, which faces the piazza. There are two entrances on this face, that towards the east being, as usual, the richest. Above these is a range of richly-ornamented windows, one of which—a little out of the centre—is far more splendid than the rest (Woodcut No. 812). From this it is said that letters and rescripts from the Greek patriarch at Constantinople used to be read, and it is perhaps as elaborate a specimen of the mode of decoration used in these churches as can be found in the province.



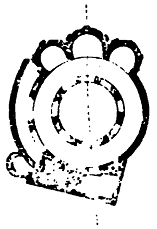
813. Doorway of Church of Pappacoda, Naples. (From Schultz.)

The same exuberance of decoration continued to be employed down to the latest period of the art, and after Northern forms had been introduced by the Angiovine dynasty at Naples. The doorway from the church at Pappacoda (Woodcut No. 813) is a type of many to be found in that city and elsewhere in the architectural province. True, it is overdone to such an extent that much of the labour bestowed upon it must be considered as thrown away; but if a love of art induced people to labour so lovingly in it, it is hard to refuse them the admiration which their enthusiasm deserves.

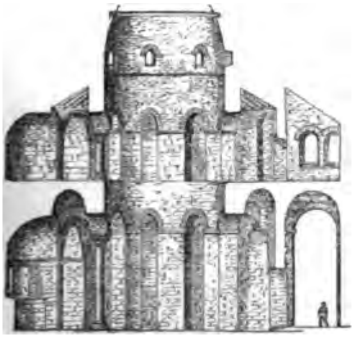
Another class of ornamental detail in which this province is especially rich is that of bronze doors, of which some six or seven examples still remain. Of these perhaps the finest are those of the cathedral at Trani. They were made in 1160, and for beauty of design, and for the exuberance and elegance of their ornaments, are unsurpassed by anything of the kind in Italy, or probably in the world. Another pair of doors of almost equal beauty, made in 1119, belongs to the cathedral at Troja (Woodcut No. 802), and a third, which is still in a very perfect state, constructed at Constantinople, in the year 1076, for the church of Monte San Angelo; and is consequently contemporary with the doors of Sta. Sophia, Novogorod, and San Zenone, Verona, and so similar in design as to form an interesting series for comparison.

Other churches in the same style as those mentioned above are found at Canosa, Giovenazzo, Molo, Ostuni, Manduria, and other places in the province. Those of Brindisi, from which we should expect most, have been too much modernised to be of value as examples; but there is in the town a small circular church of great beauty, built apparently by the Knights Templars, and afterwards possessed by the Knights of St. John. It is now in ruins, but many of the frescoes which once adorned its walls still remain, as well as the marble pillars that supported its roof. Being at some distance from the harbour, the Knights of St. John built another small church near the port, which still remains nearly unaltered.

CIRCULAR BUILDINGS.



814. Plan of San Donato, Zara. Scale 100 ft. to 1 in.



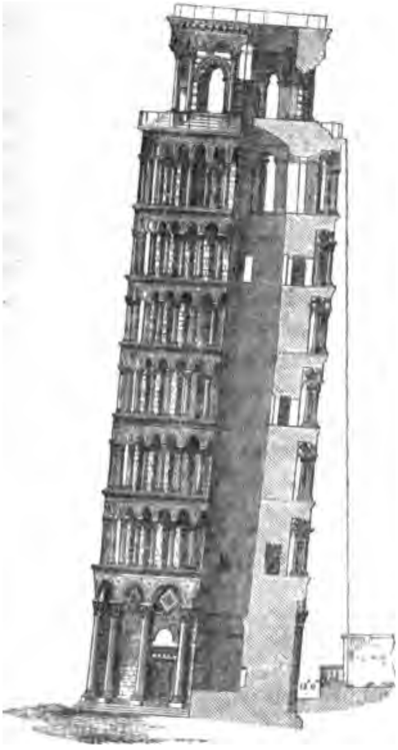
815. Section of San Donato, Zara. Scale 50 ft. to 1 in.

One of the best known, as well as one of the largest examples of this class of buildings in Italy, is the baptistery at Pisa (seen partially on the left hand of Woodcut No. 799). Internally it is, as nearly as may be, 100 ft. in diameter, and the walls are about 8 ft. 6 in. in thickness. The dome itself, however, is only 60 ft. in diameter, and is supported on four piers and eight pillars. These serve to separate the central space from the aisle which runs round it, and which is two storeys in height, but singularly ill-proportioned and clumsy in detail. The worst part of the design, however, is the dome, if dome it can be called. Internally it is conical in form, and thrust through an external hemispherical dome in a manner more clumsy and unpleasing than any other example of its class. Externally, these defects are to some extent atoned for by considerable richness and beauty of detail. It had originally only one range of blind arcades, with three-quarter columns, surmounted by an open arcade; [illegible] arrangement exactly similar to that of the two lower storeys of the cathedral and the leaning tower (Woodcut No. 816.) A considerable amount of pointed Gothic decoration was afterwards added, which, though somewhat incongruous, is elegant in itself, and hides to some extent the original defects of the design. But the outline of the building and its whole arrangements are so radically bad, that no amount of ornament can ever redeem them.

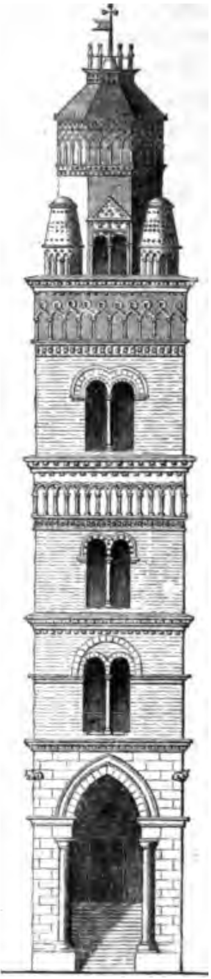
Taken altogether, the Pisan baptistery is so very peculiar, that it would be interesting if its design could be traced back to some undoubted original. That this is possible will hardly be doubted by any one at all familiar with the subject; meanwhile, the building most like it that has been illustrated is the little church of San Donato, at Zara. The church was apparently erected in the 9th century, by the saint whose name it now bears, and resembles the Pisan example in every essential particular—internally, at least, for it is so ruined and built up, that it is impossible to say what its external appearance may have been. Both from its resemblance to the Pisan baptistery and its own merits, it is an interesting addition to our knowledge of those circular churches which were such favourites with all the Christian architects in the Carlovingian period. The resemblance in this instance is the more remarkable, because the façade of the cathedral at Zara (Woodcut No. 801) is in the Pisan style, only slightly modified by local peculiarities. From what we already know, it seems undoubted that there was a close connexion—architecturally, at least—between Pisa and Zara. If this were fully investigated, it would probably throw considerable light on the origin of the Pisan style, which has hitherto seemed so exceptional in Italy, and also explain how the Byzantine element came to be so strongly developed in what at first sight appears to be a Romanesque style of art.

TOWERS.

The typical example of a tower in the Italian style is the celebrated leaning tower at Pisa, partly seen in Woodcut No. 799. It is, indeed, so far as we at present know, the only one which carries out that arrangement of numerous tiers of superimposed arcades which is so characteristic of the style. The lower storey is well designed as a solid basement for the superincumbent mass; its walls are 13 ft. in thickness, and it is adorned with 15 three-quarter columns: its height being 35 ft. The six storeys above this average 20 ft. in height, and are each adorned with an open arcade. The whole is crowned by a smaller circular tower, 27 ft. in height, in which the bells are hung. The entire height is thus 183 ft.; the mean diameter of the main portion, 52. There is no doubt that it was originally intended to stand perpendicular, though the contrary has been asserted; but before the commencement of the fifth storey the foundations had given way, and the attempts to readjust the work are plainly traceable in the upper storeys, though without success. It leans 11 ft. 2 in. out of the perpendicular,[1] which though not sufficient to endanger its stability, is enough to render it very unsightly. Even without this defect, however, its design can hardly be commended; an arrangement of six equal arcades, with horizontal entablatures, is not an expedient mode of adorning a building, where elevation is the element of success. The introduction of strongly-marked vertical lines, or some variation in the design of the arcades, would have greatly improved the design: and so the Italians seem to have thought, for it was never repeated, and the Pisan tower remains a solitary example of its class.



816. Leaning Tower at Pisa. (From Taylor and Cresy.) Scale 50 ft. to 1 in.



817. Tower of Gaeta. (From Schultz.) No scale.

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[1] The cornice projects 1 ft. 10 in., and consequently overhangs the base by 13 ft.

Nothing at all resembling it occurs in the southern parts of the province, though it must be admitted that they contain very few really important towers of any sort.

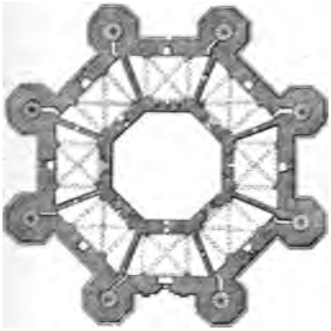
Perhaps the earthquakes to which a great portion of the country is liable may have deterred the architects from indulging in structures of great altitude; but it must be added that the idea of belfry or tower did not enter into their municipal arrangements, and their towns are not consequently illustrated by such towers as those of Venice, Cremona, or Verona in the north. Of those which do exist that of Gaeta is perhaps as picturesque as any. It was erected 1276–1290, and is both characteristic of the style and elegant in outline. As will be observed, the lower storey has pointed arches, while those above are all round; an arrangement which, though to our eyes it may appear archæologically wrong, is certainly constructively right, and the effect is very pleasing, from the height and dignity given to the entrance.

The two towers of the cathedral at Bari (Woodcut No. 804) are not so happy in design as this. They are too tall for their other dimensions, and want accentuation throughout; while the change from the lower to the upper storey is abrupt and ill-contrived. The tower at Caserta Vecchia (Woodcut No. 806) is low and squat in its proportions, and unfortunately too typical of the towers in this land of earthquakes

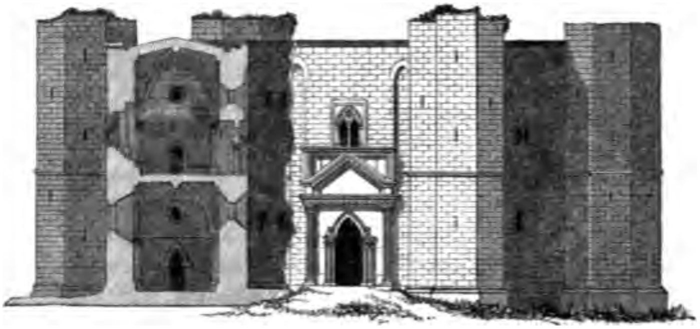
Civil Architecture.

As a rule, it may be asserted that the southern province of Italy is singularly deficient in examples of civil or domestic architecture. Great monastic establishments existed there during the Middle Ages which must have possessed buildings befitting their magnificence; but these have either perished and been rebuilt, or have been so restored that their original forms can hardly be recognised. There are, indeed, cloisters at Amalfi and Sorrento; much more remarkable, however, for the beauty of their situation than for their architecture, which is extremely rude and clumsy. There are no chapter-houses: no halls or conventual buildings of any sort. In this respect, the province forms a remarkable contrast with Spain in the same age; though it must be confessed that the North of Italy is also very deficient in conventual buildings of the Middle Ages, the most magnificent and beautiful belonging more to the Renaissance than to the Mediæval period.

At Ravello there is the Casa Ruffolo, a picturesque palace of the 13th century, still nearly entire: a strange mixture of Gothic and Saracenic taste, but so exceptional, that it would not be fair to quote it as a type of any style. It seems to owe its peculiarities more to the taste of some individual patron or architect rather than to any national taste or form of design.



818. Plan of Castel del Monte. (From Schultz.) Scale 100 ft. to 1 in.



819. Part Section, part Elevation, of Castel del Monte. (From Schultz.) Scale 50 ft. to 1 in.

There are, however, several Hohenstaufen castles of tolerable preservation, more or less typical of the domestic arts of the day in which they were erected. One of the best preserved of these is that of Castel del Monte, erected by Frederick II., 1240-44. It is an octagon in plan, with octagonal turrets at each angle. It measures 167 ft. across its extreme breadth, and surrounds a courtyard 57 ft. in diameter. Both storeys are vaulted, and all the details throughout are good and pleasing. The whole is an admixture of Italian taste, superimposed on a German design; but it will be observed how little removed the architectural details of the entrance are, even at that early age, from the style of the Renaissance. This is, indeed, the great characteristic of the architectural objects in Southern Italy. Though they adopted Christian forms, they never abandoned the classical feeling in details; and it is this which mainly renders them worthy of study. Whether considered in regard to dimensions, outline, or constructive peculiarities, their churches will not bear a moment's comparison with those of the North; but in elegance of detail they often surpass purely Gothic building to such a degree as to become to some extent as worthy of study as their more ambitious rivals.

CHAPTER VII.

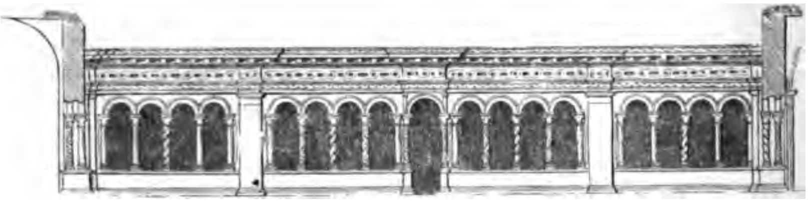
ITALIAN BYZANTINE.

CONTENTS.

Cloister of St. Giovanni Laterano — St. Mark's, Venice — St. Antonio, Padua — Church at Molfetta — Baptistery, Mont St. Angelo — Tomb, Canosa.

As before mentioned, there is a great hiatus in our history of the architecture of Italy in the dark ages. During the four centuries which elapsed from 600 to 1000, the examples are very few, and their character generally insignificant. It is true that during this period Rome went on building large churches; but it was in her own Romanesque manner, fitting together Roman pillars with classical details of more or less purity, but hardly, except in cloisters and furniture, deserving the name of a style.

Perhaps the most original, as it certainly is one of the most beautiful things the Romans did, is the cloister of St. Giovanni Laterano.

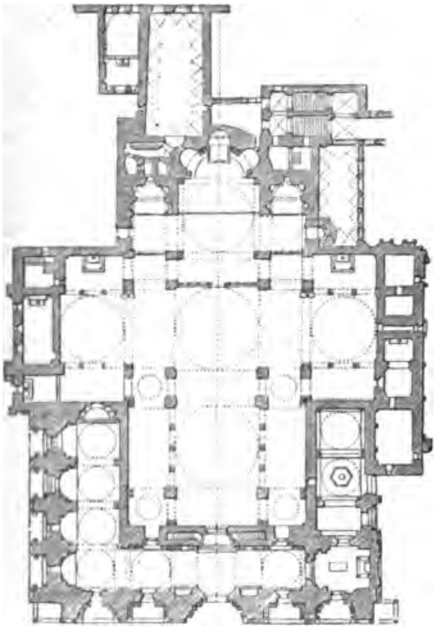


820. Church of St. Giovanni Laterano. (From Rosengarten.)

There the little arcades, supported by twisted columns, and adorned with mosaics, are as graceful and pleasing as anything of that class found elsewhere; and as they are encased in a framework of sufficient strength to take off all appearance of mechanical weakness, their unconstructive forms are not unpleasing. The entablature, which is the ruling feature in the design, retains the classical arrangement in almost every detail, and in such purity as could only be found in Rome in the 12th century, when this cloister appears to have been erected; but the style never extended beyond the limits of that city, and thus has little bearing on the thread of our narrative.

When in the 11th century all the nations of Europe were seized with a desire to build large and permanent churches, we find the Italian architects producing at once a complete round-arched intersecting vaulted Gothic style, perfect and complete in all its parts, and bearing a striking resemblance to what we find on the banks of the Rhine; but when we ask by what steps it reached this completeness, and where are the examples of its progress, we are at fault.

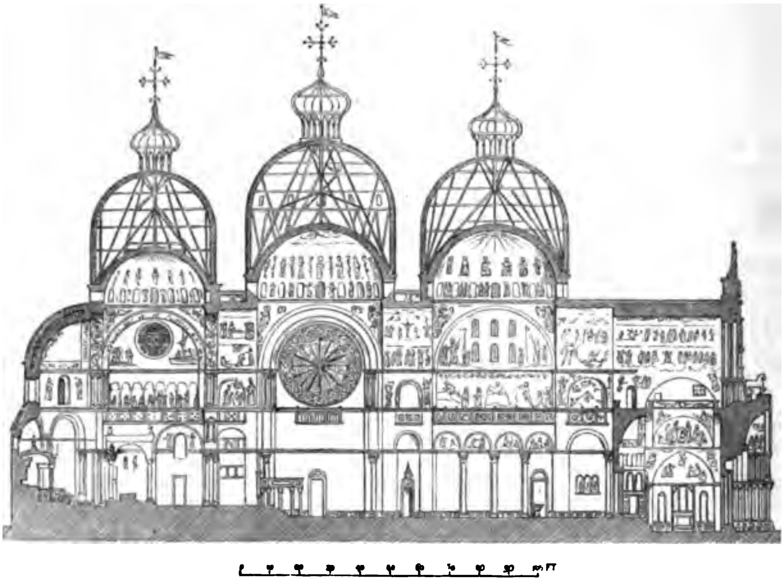
In like manner in the eleventh century we find at Venice, in Apulia, in Languedoc, and Anjou, a domical style of roof employed without hesitation, as if it had long been indigenous. Yet we are equally at a loss to explain how this, too, arose. Hitherto the usual solution has been to assert that it was imported from the East; but this hardly seems sufficient to account for the observed facts, and we must bear in mind that both the Byzantine and Gothic styles came out of Rome; and there seems no good reason why a domical style should not have been perfected on our side of the Adriatic as well as a vaulted style, even though that form of Roman art never penetrated to the East; and such, indeed, appears to have been the case. The great argument against this view is the exceptionally Oriental character of St. Mark's, at Venice. It must not be forgotten, however, that the five great domes which give such an Asiatic look to the exterior are not parts of the original design, but were added—in their present form, at least—late in the Middle Ages. The great quintuple portico, it is true, is exceptional in Europe, and may have been suggested by something seen in the East. The arrangement of this, however, seems to have been adopted in consequence of the wealth of marble columns, which the argosies of Venice brought from Alexandria and the ruined cities of the East, rather than by the exigencies of design. But even then its numerous shafts and receding planes of decoration are much more like the forms with which we are familiar in Norman portals than anything yet discovered in the Levant. The plan, too, when closely examined, is not like those found in the East. There are many five-domed churches, it is true, on the other side of the Adriatic; but there the four subordinate domes are arranged diagonally on the corners around the



821. Plan of St. Mark's, Venice.

central dome. At St. Mark's they are in front, behind, and beside it, making a great transeptal arrangement, which, to say the least of it, is very unusual in the East, if indeed it is there known at all.

Many are inclined to ascribe to it an Oriental origin from the profusion of gold mosaics which cover every part of its interior; but this was the case with the apses and semi-domes of all the Romanesque churches, and generally of the walls too, when the light was favourable. They could not so adorn their roofs, because they were of wood; and the Gothic architects were equally debarred, by the twisted and cut-up surfaces of their vaults, from the employment there of this class of decoration.



822. Section of St. Mark's, Venice. (From 'Chiesi Principali di Europa.')

There can be no doubt that, owing to their continual intercourse with the East, the Venetians received many hints from a country that had at that time more leisure to work out this style. The probability is that if we had a few more examples of what was doing in Italy, from the decline of Ravenna to the rise of Venice, we might more certainly associate St. Mark's with the indigenous French and Italian styles of that age than has hitherto been thought probable.

The foundations of the present church were laid in 977, in replacement of the original building burnt down in a tumult in the previous year, and it was completed in all essentials within a century from that time (1071); but the mosaics and internal decorations occupied ten, or some say twenty, years more, so that the church was not dedicated till 1085 or 1094.[1]

The part first erected was apparently the internal church, covered by the five great domes, which are arranged in the form of a Latin, not of a Greek cross. The central one, and that in front of it, are 42 ft. in diameter internally; the other three 33 ft. The external aisle or portico which envelopes three sides of the nave, was added afterwards, though probably in immediate continuation of the central building. It is this which gives to the plan of the church a somewhat square or Byzantine form. But the extreme richness of decoration displayed on the exterior of the porch is very unlike anything we know of in the Eastern Empire. Few things, indeed, are more remarkable than the external plainness of the great Byzantine edifices of Justinian's age, and for several centuries afterwards. So far as we can at present judge, it appears that the eastern architects borrowed the fashion of ornamenting their exteriors from their Western brethren; and it would probably be more correct to ascribe the subsequent decoration of Byzantine edifices to the example of St. Mark's, than to assume that its design was borrowed from the East.

Internally the church measures 205 ft. east and west, and 164 ft. across the transepts. Externally these dimensions are increased to 260 ft. by 215 ft., and the whole area to about 46,000 ft.; so that, though of respectable dimensions, it is by no means a large church. Nor is the arrangement of the plan, or the disposition of the parts, at all equal to those of Northern architects, if looked at from a purely architectural point of view. The screens of pillars which divide the nave from the aisles are unmeaning; the projection of the transepts is too great for the length, and the general arrangement wanting in unity. It is impossible, however, to find fault with plain surfaces, when they are covered with such exquisite gold mosaics as those of St. Mark's; or with the want of accentuation in the lines of the roof, when every part of it is more richly adorned in this manner than any other church of the Western World. Then, too, the rood-screen, the pulpit, the pala d'oro, the whole furniture of the choir, are so rich, so venerable, and on the whole so beautiful, and seen in so exquisitely subdued a light, that it is impossible to deny that it is perhaps the most impressive interior in Western Europe. St. Front, at Perigueux,

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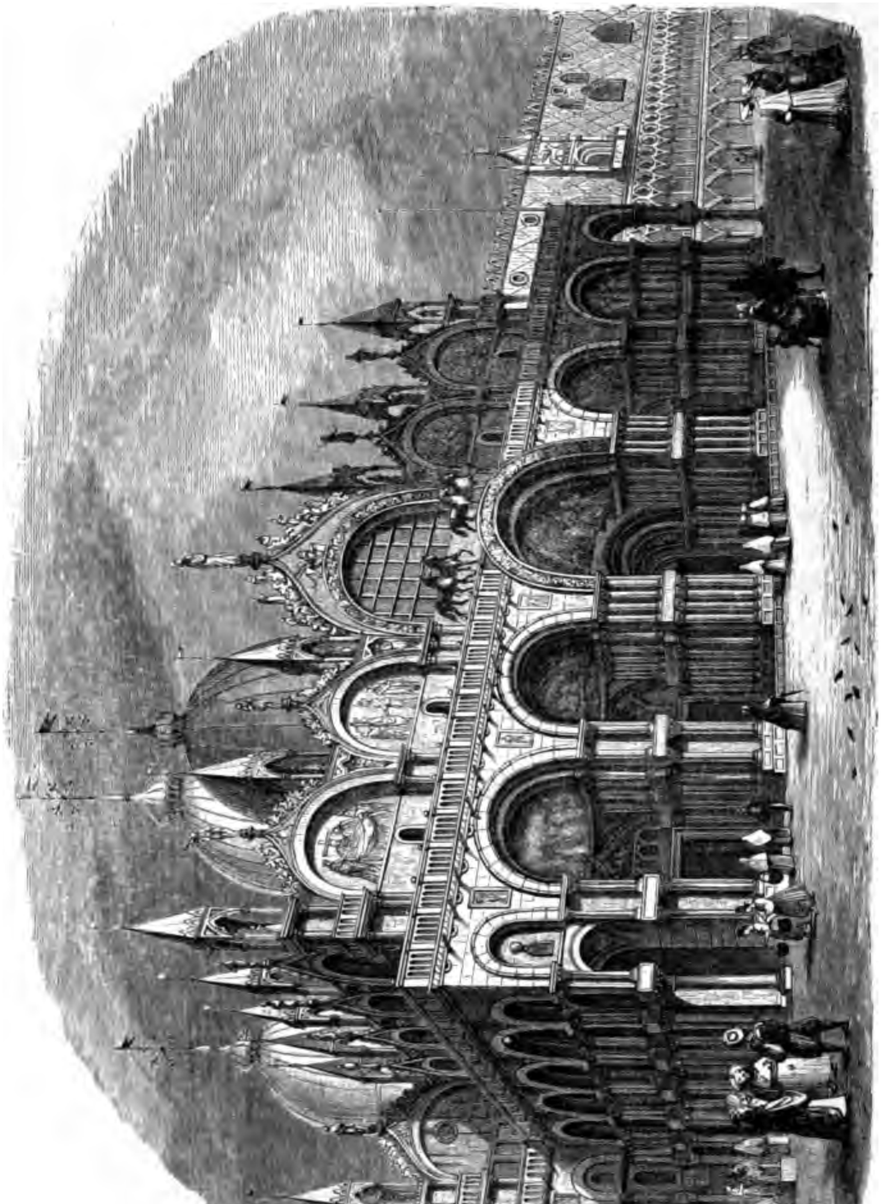
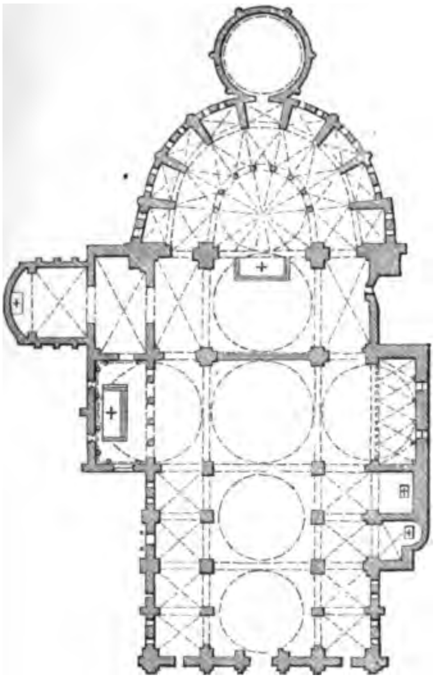
[1] Recently a crypt has been discovered and cleared out, which extends under the whole of the eastern part of the church, 86 ft. by 74. Its vault is supported by fifty-six monolithic columns, 5 ft. 6 in. high; the whole height from the floor to the crown of the arch being under 9 ft. In the centre, immediately under the high altar of the upper church, on a raised platform between four stone piers, originally rested the relics of St. Mark; this part being much more highly ornamented than the rest of the crypt. There seems no reason for doubting that the whole of this crypt in all its details forms part of the church as re-erected in the 11th century, and is interesting as remaining almost unaltered to the present day.



823. View of St. Mark's, Venice. (From Rosengarten.)

with almost identical dimensions and design (Woodcut No. 329), is cold, scattered, and unmeaning, because but a structural skeleton of St. Mark's, without its adornments. The interior of a 13th-century Gothic church is beautiful, even when whitewashed; but these early attempts had not yet reached that balance between construction and ornament, which is necessary to real architectural effect.

The same is true of the exterior; if stripped of its ornament and erected in plain stone it would hardly be tolerable, and the mixture of florid 14th-century foliage and bad Italian Gothic details with the older work would be all but unendurable. But marble, mosaic, sculpture, and the all-hallowing touch of age, and association, disarm the critic, and force him to worship when his reason tells him he ought to blame.


324. Plan of St. Antonio, Padua. (From Wiebeking.) Scale 100 ft. to 1 in.

Much as St. Mark's must have been admired in the days of its freshness, the Gothic feeling seems to have been so strong in Northern Italy in the 11th and 12th centuries as to prevent its being used as a model. The one prominent exception is San Antonio, Padua (1237–1307), which is evidently a copy of St. Mark's, but with so much Gothic design mixed up with it as to spoil both. Length was sought to be obtained by using seven domes instead of five, and running an aisle round the apse. The side-aisles were covered with intersecting vaults, and pointed arches were occasionally introduced when circular would have harmonised better with the general design.

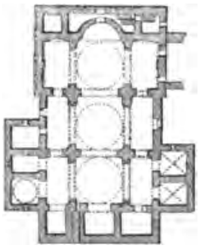
Externally the enveloping porch was omitted—not even the Pisan modification of it introduced, though it might have been employed with the happiest effect. The consequence of all this jumble is, that San Antonio is externally one of the most unsatisfactory churches in Europe, though possessing a quaint Oriental look from the grouping of its dome with the minaret-like spires which adorn it. The inside is [illegible] bad, though a roof of only five bays over a quasi-Gothic church

200 ft. in length distorts the proportion, and, with the ill-understood details of the whole, spoils what narrowly escaped being one of the most successful interiors of that part of Italy.

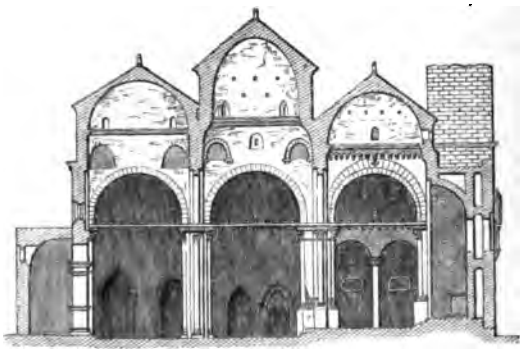
Southern Italy.

As already remarked, the architects of the southern half of the Italian peninsula were generally content to adopt the Romanesque plan of covering their naves with a wooden roof—for when an intersecting vault is found it is clearly a French or German interpolation—but they often employed one dome, generally over the altar, and used it as an ornament both external and internal. The two illustrations already given of the domes at Bari (Woodcut No. 804) and Caserta Vecchia (Woodcut No. 806) show the form these usually took in the province. They belong to a type not unusual in the East, but unknown to the Gothic architects of Europe.

When called upon to roof their churches with stone, they almost invariably adopted the domical in preference to the vaulted form, as at Molfetta (1162) where they make a pleasing form of roof, not unlike that of Loches Cathedral (Woodcut No. 351). The great defect of domes when thus employed is their height, which generally throws the whole of the building out of proportion, and unless light is introduced through openings in the drum, or in the dome itself, they are dark and gloomy. This is certainly the case at Molfetta, but otherwise the church seems well designed and of pleasing proportions. To be successful, domes should be low and flat internally; and any height required externally must be given by a false dome, as at St. Mark's, or as done by the Renaissance architects generally.

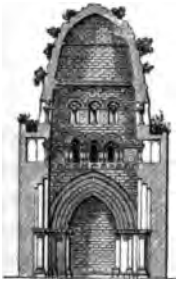


825. Plan of Church at Molfetta. Scale 100 ft. to 1 in.

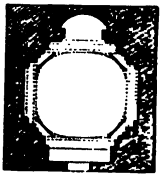


826. Section of Church at Molfetta. (From Schultz.) Scale 50 ft. to 1 in.

This was not so much felt when the building was square and covered by only one dome, like the baptistery or tomb below Mont St. Angelo, where effect of space on the floor was not aimed at so much as a combination of external dignity with limited dimensions in plan, and was attained by the arrangement adopted. As will be observed, the pointed arch, as in the tower at Gaeta (Woodcut No. 817), is used in the basement, but above this round arches with balusters for pillars such as we should call Saxon, though their age here may be the 12th century.

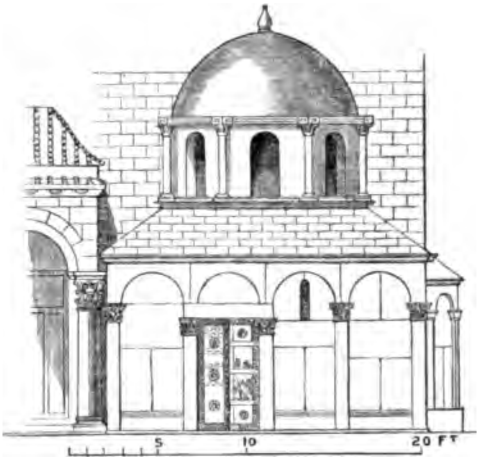


827. Baptistery, Mont St. Angelo. Scale 50 ft. to 1 in.



828. Plan of Baptistery, Mont St. Angelo. Scale 50 ft. to 1 in.

Among the little bits of Orientalism that crop up here and there all over the province, one of the most pleasing is the little tomb of Bohemund at Canosa (1111). It is charming to find in Italy an Eastern kubr with its dome, erected to contain the remains of a Christian king. Though elegant, however, the dome is not fitted to the square as it would have been in more experienced hands, and the whole design is somewhat badly put together. Its bronze doors are among its chiefest ornaments, and are elegant, though inferior to numerous examples of the same class in the churches of the province.



829. Tomb of Bohemund at Canosa. (From Schultz.)

Many other examples of Byzantine domical forms might be quoted as existing in Southern Italy. It is not, however, so much in the forms as in the details that the Eastern influence is felt, and that no less in the churches which retain the basilican form of Ravenna than in those which assume the domical form of Constantinople.

The buildings of the Southern Province cannot certainly compete with those of the Northern either in size or in daring mechanical construction, but in detail they are frequently more beautiful, while their forms are more national and less constrained. Their great interest, however, in the eyes of the student, consists in their forming a link between the Eastern and Western worlds, and thus joining together two styles which we have hitherto been too much in the habit of considering as possessing no point of contact.

CHAPTER VIII.

SICILY.

CONTENTS.

Population of Sicily—The Saracens—Buildings at Palermo—Cathedral of Monreale.
Cefalu—The Pointed Arch.

THERE are few chapters of architectural history—at least among the shorter ones—more interesting, in various ways, than that which treats of the introduction of the pointed-arched style into Sicily, and its peculiar development there. The whole history is so easily understood, the style itself so distinct from any other, and at the same time so intrinsically beautiful, that it is of all the divisions of the subject the one best suited for a monograph. and so it seems to have been considered by many—Hittorff and Zanth,[1] the Duke of Serra di Falco,[2] and our own Gally Knight,[3] having chosen it for special illustration, so that in fact there are few European styles of which we have more complete information. Many of the points of its history are nevertheless still subjects of controversy, not from any inherent obscurity in the subject, but because it has been attempted to apply to it the rules and theories derived from the history of Northern art.

The map of Sicily tells its whole history; its position and form reveal nearly all that is required to be known of the races that inhabited it, and of their fate. Situated in the centre of the Mediterranean Sea, of a nearly regular triangular form, and presenting one side to Greece, another to Africa, and a third to Italy, the length of these coasts, and their relative distance from the opposite shores, are nearly correct indexes of the influence each has had on the civilisation of the island.

In a former chapter[4] it was shown how strong was the influence of Dorian Greece in Sicily. Almost all the ancient architectural remains belong to that people. The Carthaginians, who succeeded the Greeks, left but slight traces of humanising influence; and the rule of the Romans was that of conquerors, oppressive and destructive of the civilisation of the people. After the Christian era, a very similar succession of influences took place. First and most powerful was the Byzantine element, which forms the groundwork and main ingredient in all that follows. To this succeeded the Saracenic epoch: bright, brilliant, but evanescent. In the 11th century the Italian element resumed its sway under the banner of a few Norman adventurers, and in the guise of a Norman conquest sacerdotal Rome regained the inheritance of her imperial predecessor. In the Christian period, however, the elements were far from being so distinct as in those preceding it, for reasons easily understood. Every fresh race of masters found the island already occupied by a very numerous population of extremely various origin. The new-comers could do no more than add their own forms of art to those previously in use; the consequence being in every case a mixed style, containing elements derived from every portion of the inhabitants.

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[1] 'Architecture Moderne de la Sicile,' fol. Paris, 1826–30.

[2] 'Del Duomo di Monreale e di Altre Chiese Siculo-Normane,' fol. Palermo, 1838.

[3] 'Normans in Sicily,' 8vo. text, fol. plates, London, 1838.

[4] Part I. Bk. III. ch. 2.

We have no means of knowing the exact form of the Byzantine churches of Sicily before the Arab invasion. All have either perished or are undescribed. The Saracenic remains, too, have all disappeared, the buildings generally supposed to be relics of their rule being now proved to have been erected by Moorish workmen for their Christian masters. With the Norman sway a style arose which goes far to supply all these deficiencies, being Greek in essence, Roman in form, and Saracenic in decoration; and these elements mixed in exactly those proportions which we should expect. Nowhere do we find the square-domed plans of the Greek Church, nor any form suited to the Greek ritual. These have given place to the Roman basilica, and to an arrangement adapted to the rites of the Romish Church; but all the work was performed by Greek artists, and the Roman outline was filled up and decorated to suit the taste and conciliate the feelings of the worshippers, who were conquered Greeks or converted Moors. Their fancy, too—richer and happier than that of the ruder races of the West—was allowed full play. An Eastern exuberance in designing details and employing colours is here exhibited, cramped a little, it must be confessed, by the architectural forms and the ritual arrangements to which it is applied, but still a ruling and beautifying principle throughout.

Among all these elements, those who are familiar with architectural history will hardly look for anything indicative of purely Norman taste or feelings. A mere handful of military adventurers, they conquered as soldiers of Rome and for her aggrandisement, and held the fief for her advantage: they could have brought no arts even if their country had then possessed any. They were content that their newly-acquired subjects should erect for them palaces after the beautiful fashion of the country, and that Roman priests should direct the building of churches suited to their forms, but built as the Sicilians had been accustomed to build, and decorated as they could decorate them, better than their masters and conquerors.

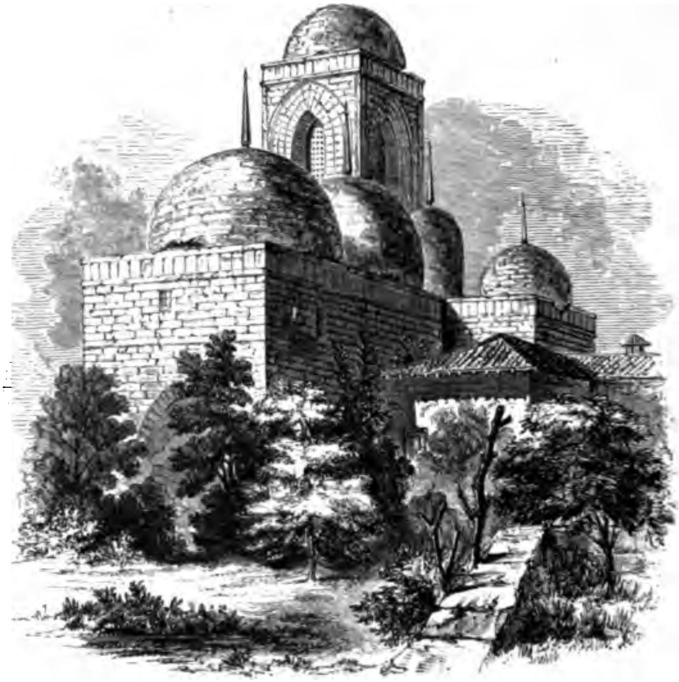
All this, when properly understood, lends an interest to the history of this little branch of architecture, wholly independent of its artistic merit; but the art itself is so beautiful and so instructive, from its being one of the styles where polychromy was universally employed and is still preserved, that notwithstanding all that has been done, it still merits more attention.

It is extremely difficult, in a limited space, to give a clear account of the Sicilian pointed style, owing to the fusion of the three styles of which it is composed being far from complete or simultaneous over the whole island, and there being no one edifice in which all three are mixed in anything like equal proportions. Each division of the island, in fact, retains a predilection for that style which characterised the majority of its inhabitants. Thus Messina and the northern coast as far as Cefalu remained Italian in the main, and the churches there have only the smallest possible admixture of either Greek or Saracenic work. The old parts of the Nunziatella at Messina might be found at Pisa, while the cathedral there and at Cefalu would hardly be out of place in Apulia, except indeed that Cefalu displays a certain early predilection for pointed arches, and something of Greek feeling in the decoration of the choir.

In like manner in Syracuse and the southern angle of the island, the Greek feeling prevails almost to the exclusion of the other two. In Palermo, on the other hand, and the western parts, the architecture is so strongly Saracenic that hardly any antiquary has yet been able to admit the possibility of such buildings as the Cuba and Ziza having been erected by the Norman kings. There is, however, little or no doubt that the latter was built by William I. (1154–1169), and the other about the same time, though by whom is not so clear. Both these buildings were erected after a century of Norman dominion in the island: still the Moorish influence, so predominant in them, need not astonish us, when we consider the immeasurable superiority of the Moors in art and civilisation, not only to their new rulers, but to all the other inhabitants. It was therefore only natural that they should be employed to provide for the Norman Counts such buildings as they alone had the heart to erect and adorn.

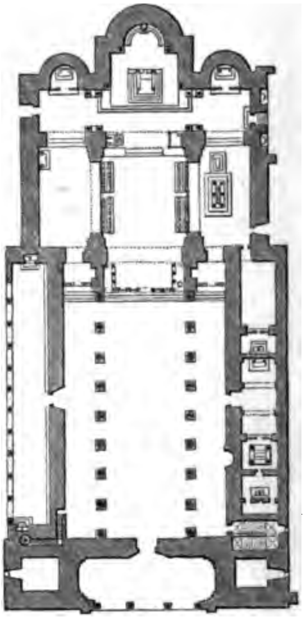
A still more remarkable instance of the prevalence of Saracenic ideas is represented in Woodcut No. 830, being the Church of San Giovanni degli Eremiti at Palermo. Here we find a building erected beyond all doubt as late as the year 1132, by King Roger, for the purposes of Christian worship, which would in no respect, except the form of its tower, be out of place as a mosque in the streets of Delhi or Cairo. In fact, were we guided by architectural considerations alone, this church would have more properly been described under the head of Saracenic than of Christian architecture.

There are three other churches of Palermo which exhibit the new mixed style in all its completeness. These are the Martorana (1113–1139), in which the Greek element prevails somewhat to the exclusion of the other two; the Capella Palatina in the Palace, built in 1132; and the more magnificent church of Monreale, near Palermo (Woodcut No. 831), begun in 1174, and certainly the finest and most beautiful of all the buildings erected by the Normans in this country. This church is 315 ft. in its extreme length; while the beautiful gem-like Capella of the royal palace is much smaller, being only 125 ft. long, and consequently inferior in grandeur, though in the relative proportions of its parts, and in all other essential points, very similar.



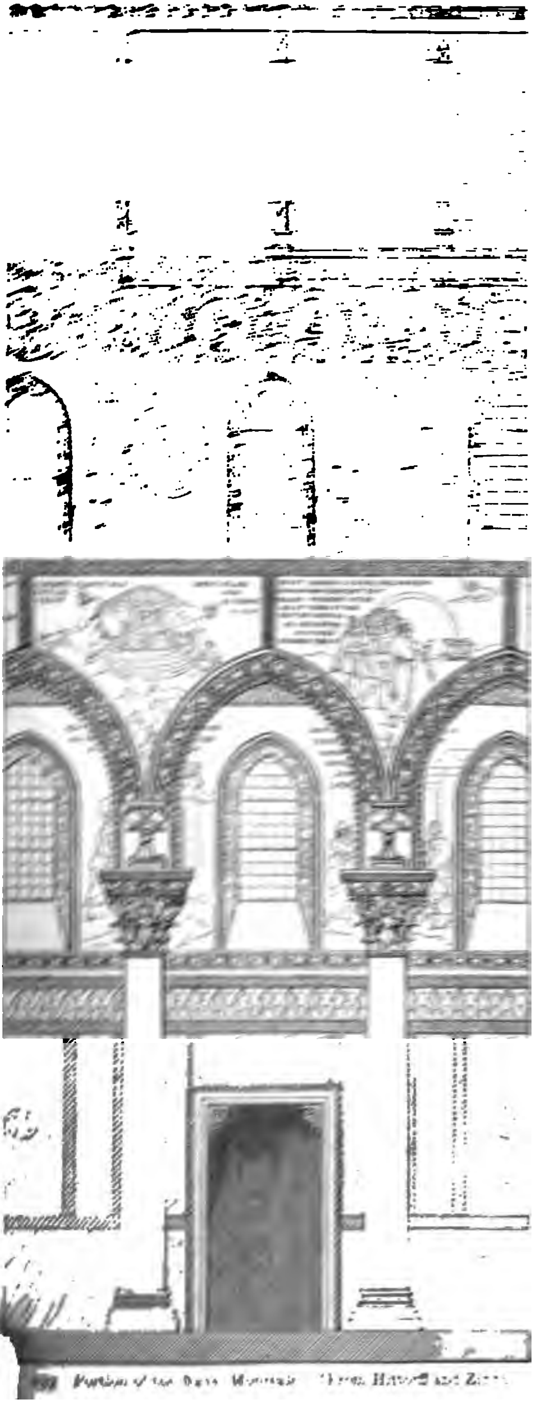
830. San Giovanni degli Eremiti, Palermo. (From Gally Knight's 'Normans in Sicily.')

In arrangement and dimensions the cathedral of Monreale very much resembles that at Messina, showing the same general influence in both; but all the details of the Palermitan example betray that admixture of Greek and Saracenic feeling which is the peculiarity of Sicilian architecture. There is scarcely a single form or detail in the whole building which can strictly be called Gothic, or which points to any connexion with Northern arts or races. The plan of this, as of all the Sicilian churches, is that of a Roman basilica, far more than of a Gothic church. In none of them was any vault ever either built or intended. The central is divided from the side-aisles by pillars of a single stone, generally borrowed from ancient temples, but (in this instance at least) with capitals of great beauty, suited to their position and to the load they have to support. The pier-arches are pointed, but not Gothic, having no successive planes of decoration, but being merely square masses of masonry of simple but stilted forms. The windows, too, though pointed, are undivided, and evidently never meant for painted glass. The roofs of the naves are generally of open framing, like those of the basilicas, and ornamented in Saracenic taste. The aisles, the intersection of the transepts and nave, and the first division of the sanctuary are generally richer, and consequently more truly Moorish. The apse again is Roman. Taken altogether, it is only the accident of the pointed arch having been borrowed from the Moors that has led to the idea of Gothic feeling existing in these edifices. It does exist at Messina and Cefalu, but in Palermo is almost wholly wanting.



831. Plan of Church at Monreale. (From Hittorff and Zanth.) Scale 100 ft. to 1 in.

It is evident that the architectural features in the buildings of which the cathedral of Monreale is the type, were subordinate, in the eyes of their builders, to the mosaic decorations which cover every part of the interior, and are in fact the glory and pride of the edifice, by which alone it is entitled to rank among the finest of Mediæval churches. All the principal personages of the Bible are represented in the stiff but grand style of Greek art, sometimes with Greek inscriptions, and accompanied by scenes illustrating the Old and New Testaments. They are separated by and intermixed with arabesques and ornaments in colour and gold, making up a decoration unrivalled in its class by anything—except, perhaps, St. Mark's—the Middle Ages have produced. The church at Assisi is neither so rich nor so splendid. The Certosa is infamous in taste as compared with this Sicilian cathedral. No specimen of opaque painting of its class, on this side of the Alps, can compete with it in any way. Perhaps the painted glass of some of our cathedrals may have surpassed it, but that is gone. In this respect the mosaic has the advantage. It is to be regretted that we have no direct means of comparing the effect of these two modes of decoration. In both the internal architecture was

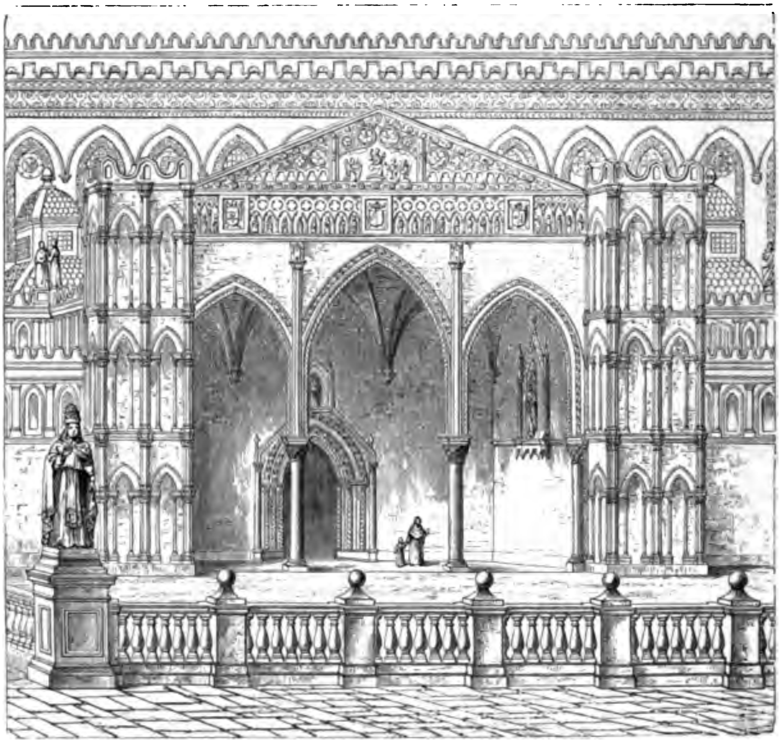


[illegible] Portion of the Nave, Monreale. (From Hittorff and Zanth.)

[illegible] Besides the [illegible] which [illegible] the upper part of the walls of these churches, [illegible] another mode of decoration almost equally effective, the whole of the lower part of the walls being covered with slabs of marble [illegible] disposed in the most beautiful patterns. The Martorana depends wholly for its effect on this species of decoration. In the Capella Palatina and the church at Monreale it occupies the lower part of the walls only, and serves as a base for the storied decorations above; but whether used separately or in combination, the result is perfect, and such as is hardly attained in any other churches in any part of Europe.

Externally the Gothic architects had immensely the advantage. They never allowed their coloured decorations to interfere with their architectural effects. On the contrary, they so used them as to make the windows externally as well as internally their most beautiful and attractive features.

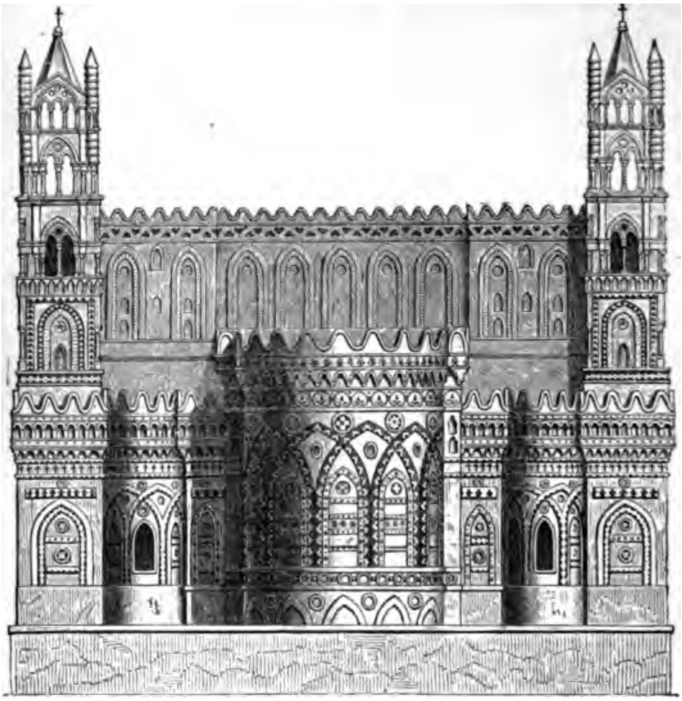
The cathedral of Palermo, the principal entrance of which is shown in Woodcut No. 833, is a building of much later date, that which we now see being principally of the 14th century. Although possessing no dignity of outline or grace of form, it is more richly ornamented externally with intersecting arches and mosaic decorations than almost any other church of its class. It is richer perhaps and better than the cathedral of Florence, inasmuch as the decorations follow the construction, and are not—as there—a mere unmeaning panelling that might be applied anywhere. All this is more apparent in the apse (Woodcut No. 834) than on the lateral elevation. It converts what would be only a very plain exterior into a very rich and ornamental composition; not quite suited to Northern taste, but very effective in the sunny South. Still the effect of the whole is rather



833. Lateral Entrance to Cathedral at Palermo. (From Hittorff and Zanth.)

pretty than grand, and as an architectural display falls far short of the bolder masonic expression of the Northern Gothic churches.

After these, one of the most important churches of that age in the island is the cathedral of Cefalu, already alluded to. It was commenced by King Roger in 1131. It is 230 ft. long by 90 ft. wide. The choir and transepts are vaulted and groined; the nave has a wooden roof; all the arches are pointed; and with its two western towers it displays more Gothic feeling than any other church in Sicily.



834. East End of Cathedral at Palermo. (From Rosengarten.)

The cathedral at Messina, though closely resembling that at Monreale in plan, has been so altered and rebuilt as to retain very little of its original architecture. The other churches in the island are either small and insignificant, or, like that at Messina, have been so altered that their features are obliterated.

Besides the Saracenic castles or palaces above mentioned, there are no important civil buildings of Mediæval style in Sicily. There are two cloisters—one at Monreale and the other at Cefalu—both in the style universal in all the countries bordering on the Mediterranean Sea, and already described in speaking of those of Elne, Fontifroide, Arles, &c., as well as those of San Giovanni Laterano at Rome.

Their general arrangement consists of small but elegant pillars of Corinthian design, in pairs, supporting pointed arches of great beauty of form. In many respects this is a more beautiful mode of producing a cloistered arcade than the series of unglazed windows universally adopted in the North. The Southern method presupposes a wooden or at most a tunnel-vaulted roof, as at Arles, whereas all our best examples have intersecting vaults of great beauty, which indeed is the excuse for the windowed arrangement assumed by them. An intermediate course, like that adopted at Zurich (Woodcut No. 500), would perhaps best reconcile the difficulty; but this was only used during the period of transition from one style to the other. The effect, however, of the cloister at Monreale, with the fountain in one of its divisions, and a certain air of Eastern elegance and richness pervading the whole, is not surpassed by any of the examples on the Continent of its own size, though its dimensions do not allow it to compete with some of the larger examples of France, and especially of Spain.

As the employment of the pointed arch so early in Sicily has been much quoted in the controversy regarding the invention of that feature, it may be convenient to recapitulate here what has already been said on that subject—this being the last occasion on which it will be requisite to refer to it in the course of this work.

We have already seen that the pointed arch was used in the South of France—at Vaison, for instance—at least as early as the 10th century, but only as a vaulting expedient. During the 11th it was currently used in the south, and as far north as Burgundy; and in the 12th it was boldly adopted in the north as a vaulting, constructive, and decorative feature, giving rise to the invention of a totally new style of architectural art.

It is by no means impossible that the pointed arch was used by the Greek or Pelasgic colonists about Marseilles at a far earlier date, but this can only have been in arches or domes constructed horizontally. These may have suggested its use in radiating vaults, but can hardly be said to have influenced its adoption. Had it not been for the constructive advantages of pointed arches, the Roman circular form would certainly have retained its sway. It is possible, however, that the northern Franks would never have adopted it so completely as they did had they not become familiar with it either in Sicily or the East. When once they had so taken it up, they made it their own by employing it only as a modification of the round-arched forms previously introduced and perfected.

In Sicily the case is different; the pointed arch there never was either a vaulting or constructive expedient—it was simply a mode of eking out, by its own taller form and by stilting, the limited height of the Roman pillars, which they found and used so freely. It is the same description of arch as that used in the construction of the mosque

El-Aksah at Jerusalem in the 8th century; at Cairo in rebuilding that of Amrou in the 9th or 10th, in the Azhar and other mosques of that city, and also, I believe, in the old mosque at Kairoan, which was the immediate stepping-stone by which it crossed to Sicily. It was used too in Spain, at Cordova and Granada, before and after its introduction in Sicily, till it became a settled canon of art, and a usual form of Moorish architecture. As such it was used currently in Sicily by the Moors, and in Palermo and elsewhere became so essential a part of the architecture of the day that it was employed as a matter of course in the churches; but it was not introduced by the Normans, nor was it carried by them from Sicily into France, and, except so far as already stated, it had no influence on the arts of France. In fact there is no connexion, either ethnographically or architecturally, between the Sicilian pointed arch and the French; and beyond the accident of the broken centre they have nothing in common.

Although, therefore, it can hardly again be used as evidence in the question of the invention of the pointed arch, the architecture of Sicily deserves a better monography than it has yet been made the subject of. It must, however, be written by some one intimately familiar with the Byzantine, Saracenic, and Romanesque styles. To any one so qualified, Sicily will afford the best field in Europe for tracing the influence of race and climate on architecture; for nowhere, owing in a great measure to its insular position, can the facts be more easily traced, or the results more easily observed.

In one other point of view also the style deserves attention, for from it alone can we fairly weigh the merit of the two systems of internal decoration employed during the Middle Ages. By comparing, for instance, the cathedral at Monreale with such a building as the Sainte Chapelle at Paris, we may judge whether polychromy by opaque pictures in mosaic, or by translucent pictures on glass, is the more beautiful mode of decorating the interior of a building. The former have undoubtedly the advantage of durability, and interfere less with the architectural effect, but for beauty and brilliancy of effect I have little doubt that the general verdict would be that the latter have at least hitherto been the most successful mode. On the whole, however, it seems that a higher and purer class of art may be developed out of opaque painting than can ever be obtained from transparencies, and if this is so there can be little doubt as to which we ought now to seek to cultivate. The question has never yet been fairly discussed; and examples sufficiently approximating to one another, either in age or style, are so rare that its determination is not easy. For that very reason it is the more desirable that we should make the most of those we have, and try if from them we can settle one of the most important questions which architectural history has left to be determined with reference to our future progress in the art.

CHAPTER IX.

GOTHIC ARCHITECTURE IN PALESTINE.

CONTENTS.

Church of the Holy Sepulchre, Jerusalem—Churches at Abû Gosh and Lydda—Mosque at Hebron.

CHRONOLOGY.

	DATES.		DATES.
Jerusalem taken by the Crusaders	A.D. 1099	Third Crusade. Richard II.	A.D. 1192
Baudouin I.	1100	Frederick II. re-enters Jerusalem	1229
Baudouin II.	1118	Retaken by Sultan of Damascus	1239
Foulques, Count of Anjou	1131	Final overthrow of Christians	1244
Saladin retakes Jerusalem	1187		

It may at first sight appear strange that any form of architecture in Syria should be treated as a part of that of Italy, but the circumstances of the case are so exceptional that there can be little doubt of the correctness of so doing. Gothic architecture was not a natural growth in Palestine, but distinctly an importation of the Crusaders, transplanted by them to a soil where it took no root, and from which it died out when the fostering care of Western protection was removed. In this it is only too true a reflex of the movement to which it owed its origin. The Crusades furnish one of those instances in the history of the world where the conquerors of a nation have been so numerous as entirely to supplant, for a time, the native population and the indigenous institutions of the country. For nearly a century Jerusalem was subject to kings and barons of a foreign race. The feudal system was imported entire, with its orders of knighthood, its "Assises," and all the concomitant institutions which had grown up with the feudal system in Western Europe. With them, as a matter of course, came the hierarchy of the Roman Church, and with it the one style of architecture which they then knew, or which was appropriate to their form of worship.

The one point which is not at first sight obvious is, why the Gothic style in Palestine should be so essentially Italian, with so little admixture of the styles prevalent on the northern side of the Alps. It may have been that then, as now, the Italians settled loosely in the land. We know that the trade of the Levant was at that time in the hands of Venice and other Italian cities, and it is clear that it was easier to send to Italy for artists and workmen, than to France and

Germany, and much more likely that an Italian would undertake the erection of buildings in the East than a Northern architect, whose ideas of Palestine and its ways must have been extremely indistinct. Be this as it may, there is little in the Gothic architecture of Palestine either as regards arrangement or details—except the plan of the church of the Holy Sepulchre—which would excite attention as singular if found in the South of Italy or Sicily; and as little that would not seem out of place if found on our side of the Alps.

Holy Sepulchre.

The principal building erected by the Crusaders in Palestine was, as might be expected, the church of the Holy Sepulchre—the deliverance of which from the hands of the infidels was the object of that wonderful outburst of national enthusiasm.

For a century or more before the Crusades the Christians had been debarred from approaching the sacred dome erected by Constantine over the holy rock which still contains the cave—the "salutary monument of our Saviour's resurrection,"[1] and had been obliged to content themselves with a temporary church of very moderate pretensions erected in their own quarter of the city.[2] In this latter building the Easter rites had been celebrated since the year 1048; and when the Crusaders (in 1099) achieved the unexpected deliverance of the city from the Moslem, it seemed to the uncritical intellect of the age better to retain the church where it then was than to unsettle the belief of the ignorant by transferring it back to its original site. The "Dome of the Rock"—now known to European travellers as the "Mosque of Omar"—which was undoubtedly the church which Constantine erected over what he believed to have been the Sepulchre of Christ—was throughout the 12th century considered as equal in sanctity with the church of the Sepulchre, and the veneration with which it was regarded had, no doubt, considerable influence on the architecture of the age.

When the Crusaders reached Jerusalem the sepulchre on the spot where it now stands appears to have stood in a court open to the sky,[3] with five small chapels attached to it.

As soon as their kingdom was sufficiently consolidated and leisure afforded them, the Crusaders set about rebuilding this church, apparently from its foundations. There is no precise record of when this took place, but it must have been about the year 1130. The plan they decided upon for this purpose was both pleasing and appropriate, though entirely at variance with the arrangement of a basilica and independent tomb-house adopted by Constantine when he erected his sacred buildings in Jerusalem, some seven centuries before the Crusades. The form of the new buildings is now tolerably familiar to the student of architecture. The earliest germ of it is found in the church of St. George at Thessalonica (Woodcut No. 877). It is further developed at Bozrah (Woodcut No. 871). It was currently employed in the North of Europe (Woodcuts Nos. 554 to 559), and bloomed into perfection at Cologne in the church of St. Gereon (Woodcut No. 506). It is also found at Little Maplestead (Woodcut No. 611), Zara (Woodcut No. 814), and elsewhere. In all these instances it consists of a circular nave leading to a rectangular choir terminated by an apse. Though primarily sepulchral in its origin, it is used in all these places without any reference to its original destination, and had become a recognised form of Christian church for the ordinary purposes of worship. At Jerusalem, however, it was chosen because its form recalled the purpose to which it was there to be applied. The circular nave again became the receptacle of the tomb, and the choir and its apse were turned towards the east in obedience to the Northern superstition as respects orientation.

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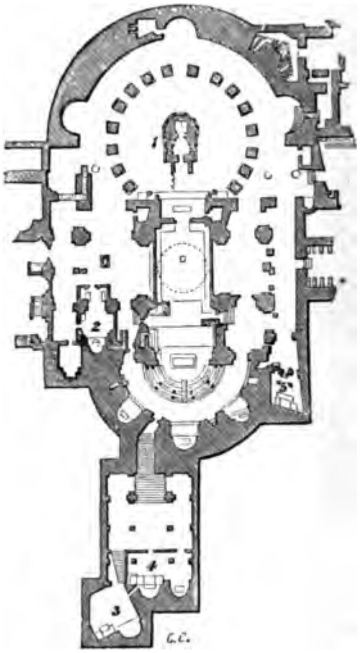
[1] Eusebius, 'Vita Constantini,' lib. iii. ch. xxviii.

[2] For particulars regarding the transference the reader is referred to the Author's Essays on 'The Ancient Topography of Jerusalem,' and 'The Sepulchre and the Temple at Jerusalem.'

[3] Sæwulf, 'Peregrinatio,' &c. (A.D. 1102-3), p. 83.



835. Plan of the Church of the Holy Sepulchre. (From B. Amico.[1]) Scale 100 ft. to 1 in.

Though containing so many objects of interest, the church itself is not large, measuring only 245 ft. long internally, exclusive of the crypt and chapel of the Cross, which extend beyond the apse to the eastward in such a manner as entirely to preclude the idea of a nave ever having existed in that direction.

So far as can be judged from the information which remains to us, the style (before the fire of 1808, after which the Rotunda was entirely rebuilt) was tolerably homogeneous throughout. The circular part (dedicated 1149), which was that first erected, was constructed wholly in the round-arched style. The choir and apse, which were not completed before 1169, show the progress the new style was then making. All the constructive arches in this part of the building are pointed—but the decorative portions still retain the circular form.

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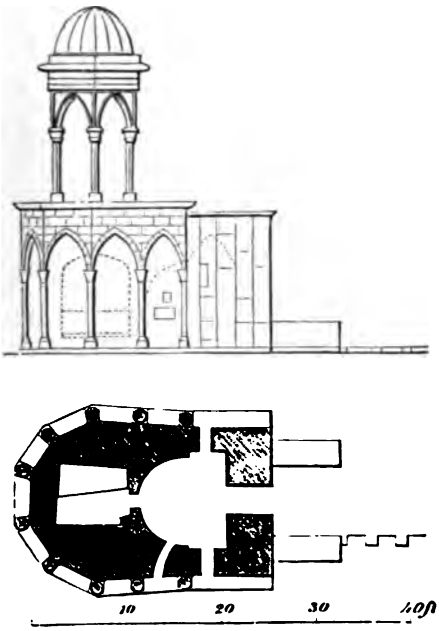
[1] 'Piante e Imagini de' Sacri Edifizi di Terra Santa. Fierenza, 1609.'

Owing to its situation and its being so much encumbered by other buildings, the only part of the exterior which makes any pretension to architectural magnificence is the southern double portal, erected apparently between the years 1140 and 1160. This is a rich and elegant example of the style of ornamentation prevalent in Sicily and Southern Italy in the 12th century, but its most elaborate decoration is supplied by two rich cornices of classical date, built in unsymmetrically as string-courses, amongst details belonging to the time of the Crusades. From their style these cornices undoubtedly belong to the age of Constantine, and are probably fragments of his basilica, which had been destroyed in the beginning of the 11th century by El-Hakem, and the ruins of which must have been lying about at the time this church was in course of erection. At an earlier age such fragments would probably have been more extensively used up; but in the 12th century the architects had acquired confidence in themselves and their own style, and despised classical arrangements both in plan and in detail.



836. Holy Sepulchre – Plan and Elevation as it existed before the fire in 1808. (From Bernardino Amico.)

The sepulchre itself seems to have been rebuilt, about the year 1555,[1] or at least so thoroughly repaired that it is difficult to say what its exact original form may have been. Probably it did not differ materially from that shown in the woodcut, since that resembles the style of the 12th much more than that of the 16th century. In any case, it furnishes a curious exemplification of the uncritical simplicity of the age. The walls were marble inside and out, and in some places 18 in. or less than 2 ft. in thickness, so that it is impossible that there could be any live rock between the marble slabs.

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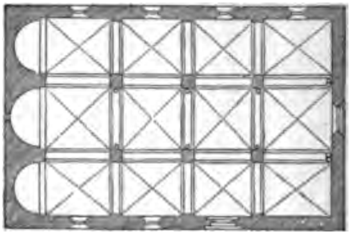
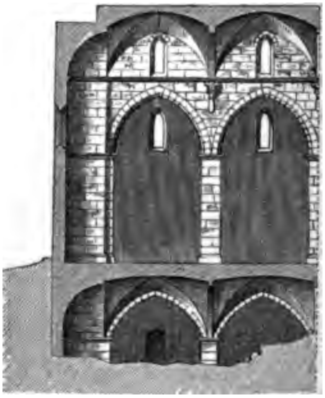
[1] Quaresimus, 'Elucidatio,' ii. p. 386.

It would have been so easy to have made the walls thicker, or to have built them up with rough unhewn masses of rock! But the unsuspecting faith of the Middle Ages would have been equally willing to believe it was rock-cut, if told so, had it been fashioned in wood or in any other material. It probably never would have been assumed that the rock was there if it were not so difficult for educated men in a critical age to understand the simple faith of dark ages. A man must live among people in an early stage of civilisation, and see miracles performed, before he can understand what took place in Europe between the 8th and 13th centuries.

Although the church of the Holy Sepulchre was, naturally, by far the greatest work undertaken by the Crusaders, there are some six or seven other churches in Jerusalem,[1] or its immediate vicinity, which were erected during the 12th century. The most complete of these at the present day is that of St. Anne—now in course of thorough repair by the French Government. It is a small church, 112 ft. long by 66 ft. wide internally, divided into three aisles, each terminating in an apse, and covered with intersecting vaults, showing strongly marked transverse ribs of the usual Italian pattern. It has also a small dome on the intersection between the nave and transept. The windows are small and without tracery. It is, in fact, a counterpart of the usual Italian church of the age. The same remarks apply to Ste. Marie la Grande, Ste. Marie Latine, the Madelaine, and other churches which the Christians built in their quarter of the town, during their occupation, to replace those of which the Moslems had deprived them, and which originally stood in the Haram area, in the immediate proximity of the true church of Constantine.



837. Plan of Church at Abû Gosh. (From De Vogüé.) Scale 50 ft. to 1 in.



838. East End of Church at Abû Gosh. (From De Vogüé.)

One of the most perfect churches of this age, out of Jerusalem, is that at Abû Gosh—the ancient Kirjath-Jearim (Woodcuts Nos. 837, 838). Externally it is a rectangle, 86 ft. by 57 ft., with three apses which do not appear externally. Under the whole is an extensive crypt. Though small, it is so complete, and so elegant in all its details, that it would be difficult to find anywhere a more perfect example of the style. As it now stands it is very much simpler and plainer than any Northern example of the same age would be; but it originally depended on painting for its decoration, and traces of this may still be seen on its desecrated walls. It is now used as a cattle-shed. The church at Ramleh is one of the largest, and must originally have been one of the finest, of these Syrian churches. It is now used as a mosque, and the consequent alteration of its arrangement, with plaster and whitewash, have done much to destroy its architectural effect. At Sebaste there is one as large as that at Ramleh—160 ft. by 80 ft.—and showing a more completely developed Gothic style than those at Jerusalem. At Lydda there is another very similar in detail to that last mentioned. Though now only a fragment, it is one of singular elegance, and shows a purity of detail and arrangement not usual in Northern churches of that age. De Vogüé is of opinion that both the last-named churches must have been completed before the year 1187. It is hard, however, to believe that an Italian Gothic style could have attained that degree of perfection so early, and if the date assigned is correct it is evident that the pointed style was developed earlier in the East than in the West, a circumstance which from our knowledge of what had happened in Armenia and elsewhere is by no means improbable.

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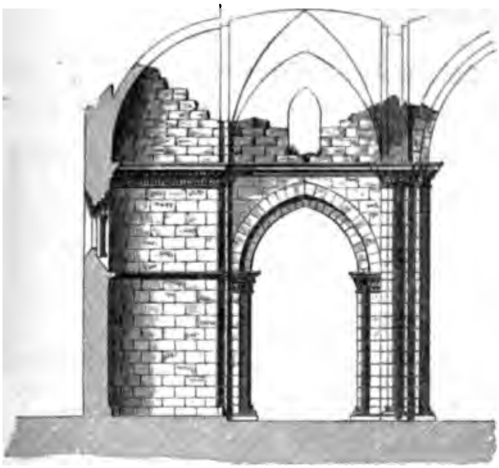
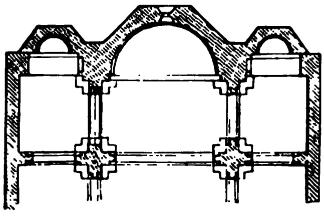
[1] All these are carefully described and delineated by Count de Vogüé, in his beautiful work entitled 'Les Églises de la Terre Sainte,' Paris, 1860.

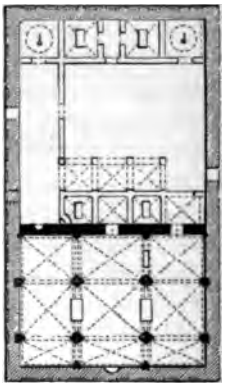


839. East End of Church at Lydda.* (From De Vogüé.)



840. Apse of Church at Lydda. Scale 50 ft. to 1 in.

The date assigned to these churches is rendered more probable by the existence of a Gothic building, certainly as advanced as any of those mentioned, within the enclosure of the mosque at Hebron. If this was a work of the Crusaders it must have been built before 1187, since the Christians never had access to the place after their defeat at Tiberias. If not erected by them, we are forced to assume that the Moslems, after recovering possession of the sepulchres of the Patriarchs, employed some Christian renegades or slaves to erect a mosque on the spot, in their own style of architecture. This is, however, by no means improbable, since it is the only Christian church (if it be one) in Palestine which has no apse, though there would have been no difficulty in introducing three apses in the same manner as at Abû Gosh (Woodcut No. 837), had it been so desired. It should also be remarked that the three aisles point southward towards Mecca, and that, except in style, it has all the appearance of a mosque. Both Christian and Mahomedan tradition are silent as to its erection, so that the determination of the question must depend on a more careful examination than has yet been possible. Whichever way it may be decided, it is a curious question. It is either a Christian building without the arrangement elsewhere universally indispensable, or it is a Moslem mosque in a Christian style of architecture. If the former, the complete development of the Italian pointed style of architecture in the East must be fixed at not less than half a century anterior to that in the West.[1]



841. Plan of Mosque at Hebron. Scale 100 ft. to 1 in.

The Gothic portion is shaded black, the Jewish hatched, and the Mahomedan outlined.

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[1] For further particulars regarding this building, see 'The Holy Sepulchre and the Temple at Jerusalem,' by the Author, Appendix J.

BOOK IX.

BYZANTINE ARCHITECTURE.

CHAPTER I.

INTRODUCTORY.

CHRONOLOGY.

	DATES.		DATES.
Constantine founds Constantinople	A.D. 324	Fall of Western Empire	A.D. 476
First Council of Nice	325	Justinian I.	527
Julian the Apostate	361	Justin II.	565
Theodosius the Great	379	Heraclius	610
Theodosius II.	408	The Hejira	622
Marcian	450		

THE term Byzantine has of late years been so loosely and incorrectly used—especially by French writers on architecture—that it is now extremely difficult to restrict it to the only style to which it really belongs. Wherever a certain amount of coloured decoration is employed, or a peculiar form of carving found, the name Byzantine is applied to churches on the Rhine or in France; although no similar ornaments are found in the Eastern Empire, and though no connection can be traced between the builders of the Western churches and the architects of Byzantium, or the countries subject to her sway.

Strictly speaking, the term ought only to be applied to the style of architecture which arose in Byzantium and the East after Constantine transferred the government of the Roman Empire to that city. It is especially the style of the Greek Church as contradistinguished from that of the Roman Church, and ought never to be employed for anything beyond its limits. The only obstacle to confining it to this definition occurs between the ages of Constantine and Justinian. Up to the reign of the last-named monarch the separation between the two churches was not complete or clearly defined, and the architecture was of course likewise in a state of transition, sometimes inclining to one style, sometimes to the other. After Justinian's time, the line may be clearly and sharply drawn, and it would therefore be extremely convenient if the term "Greek architecture" could be used for the style of the Greek Church from that time to the present day.

If that term be inadmissible, the term "Sclavonic" might be applied, though only in the sense in which the Gothic style could be designated as Teutonic. Both, however, imply ethnographic distinctions which it would not be easy to sustain. The term "Gothic" happily avoids these, and so would "Greek," but for the danger of its being confounded with "Grecian," which is the proper name for the classical style of the ancient Greeks. If the employment of either of these terms is deemed inadvisable, it will be necessary to divide the style into Old and New Byzantine—the first comprehending the three centuries of transition that elapsed from Constantine to the Persian war of Heraclius and the rise of the Mahomedan power, which entirely changed the face of the Eastern Empire,—the second, or Neo-Byzantine, including all those forms which were practised in the East from the reappearance of the style, in or after the 8th century, till it was superseded by the Renaissance.

Thus divided, the true, or Old Byzantine, style would be the exact counterpart of the Romanesque. As explained in a former chapter (vol. i. p. 400) that style was a transition from the classical Roman to the styles adopted by the Barbarians, the old style having died out about the age of Gregory the Great (A.D. 600). An exactly similar process went on in the East, and culminated in the erection of Sta. Sophia (A.D. 532–558): the difference being that during this age the Western Empire was in a state of decay, ending in a *débacle* from which the Gothic style practically emerged only some four centuries later. The Eastern Empire, on the contrary, was during that time progressively forming itself; and did form a style of its own of singular beauty and perfection, which it left to its Sclavonic successors to use or abuse as their means or tastes dictated. The Western Empire was not in a position to form a style so early, and the creation of one was reserved till after the revival in the 11th century.

Though the styles of the East and the West became afterwards so distinctly separate, we must not lose sight of the fact, that during the age of transition (324–530) no clear line of demarcation can be traced. Constantinople, Rome, and Ravenna were only principal cities of one empire, throughout the whole of which the people were striving simultaneously to convert a Pagan into a Christian style, and working from the same basis with the same materials. Prior to the age of Constantine one style pervaded the whole empire. The buildings at Palmyra, Jerash, or Baalbec, Nice or Merida, are barely distinguishable from those of the capital, and the problem of how the Pagan style could be best converted to Christian uses was the same for all. The consequence is, that if we were at present writing a history which stopped with the beginning of the 7th century, the only philosophical mode of treating the question would be to consider the style as one and indivisible for that period; but as the separation was throughout steadily, though almost imperceptibly, making its way, and gradually became fixed and permanent, it will be found more convenient to assume the separation from the beginning. This method will no doubt lead to some repetition, but that is a small inconvenience compared with the amount of clearness obtained. At the same time, if any one were writing a history of Byzantine architecture only, it would be necessary to include Ravenna, and probably Venice and some other towns in Italy and Sicily, in the Eastern division. On the other hand, in a history devoted exclusively to the Romanesque styles, it would be impossible to omit the churches at Jerusalem, Bethlehem, or Salonica, and elsewhere in the East. Under these circumstances, it is necessary to draw an arbitrary line somewhere; and for this purpose the western limits of the Turkish Empire and of Russia will answer every practical purpose. Eastward of this line every country in which the Christian religion at any time prevailed may be considered as belonging to the Byzantine province.

During the first three centuries of the style (324–622) it will be convenient to consider the whole Christian East as one architectural province. When our knowledge is more complete, it may be possible to separate it into several, but at present we are only beginning to see the steps by which the style grew up, and are still very far from the knowledge requisite for such limitations, even if it should hereafter be discovered that a sufficient number exist. All the great churches with which Constantine and his immediate successors adorned their new capital have perished. Like the churches at Jerusalem and Bethlehem, they were probably constructed with wooden roofs and even wooden architraves, and thus soon became a prey to the flames in that most combustible of capitals. Christian architecture has been entirely swept off the face of the earth at Antioch, and very few and imperfect vestiges are found of the seven churches of Asia Minor. Still, the recent researches of De Vogüé in Northern Syria,[1] and of Texier in Salonica[2] show how much unexpected wealth still remains to be explored, and in a few years more this chapter of our history may assume a shape as much more complete than what is now written, as it excels what we were compelled to be content with when the Handbook was published, 1855.

Since therefore, under present circumstances, no ethnographic treatment of the subject seems feasible, the clearest mode of presenting it will probably be to adopt one purely technical.

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[1] 'Syrie Centrale: Architecture civile et religieuse du I^er^ au VII^me^ Siècle. Par le Comte Melchior de Vogüé.' The plates are complete, the text still unpublished.

[2] 'Byzantine Architecture,' by Texier and Pullan. Folio, London, 1864.

For this purpose it will be found convenient, first, to separate the Neo-Byzantine style from the older division, which, in order not to multiply terms, may be styled the Byzantine *par excellence*; the first chapter extending from Constantine, 324, to the Hejira, 622; and the second from that time to the end of the Middle Ages.

In reference to the ecclesiastical architecture of the first division, it is proposed to treat—

First, of churches of the basilican or rectangular forms, subdividing them into those having wooden, and those having stone roofs.

Secondly, to describe circular churches in the same manner, subdividing them similarly into those with wooden roofs, and those with stone roofs or true domes.

This subdivision will not be necessary in speaking of the Neo-Byzantine churches, since they all have stone roofs and true domes.

With regard to civil or domestic architecture very little can at present be said, as so little is known regarding it, but we may hope that, a few years hence, materials will exist for an interesting chapter on even this branch of the subject.

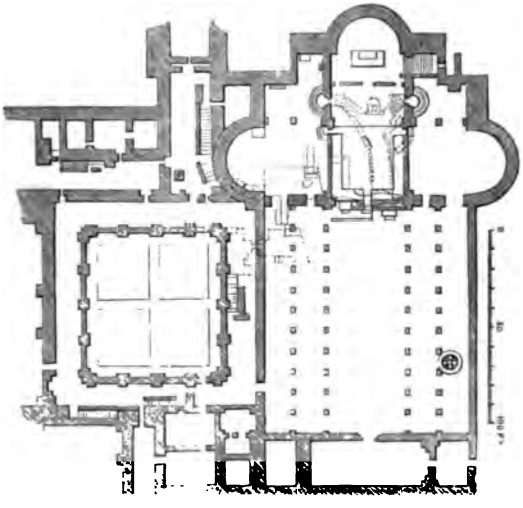
CHAPTER II.

BASILICAS.

CONTENTS.

Churches at Bethlehem, Jerusalem, and Thessalonica — Rectangular Churches in Syria and Asia Minor, with wooden roofs and stone vaults.

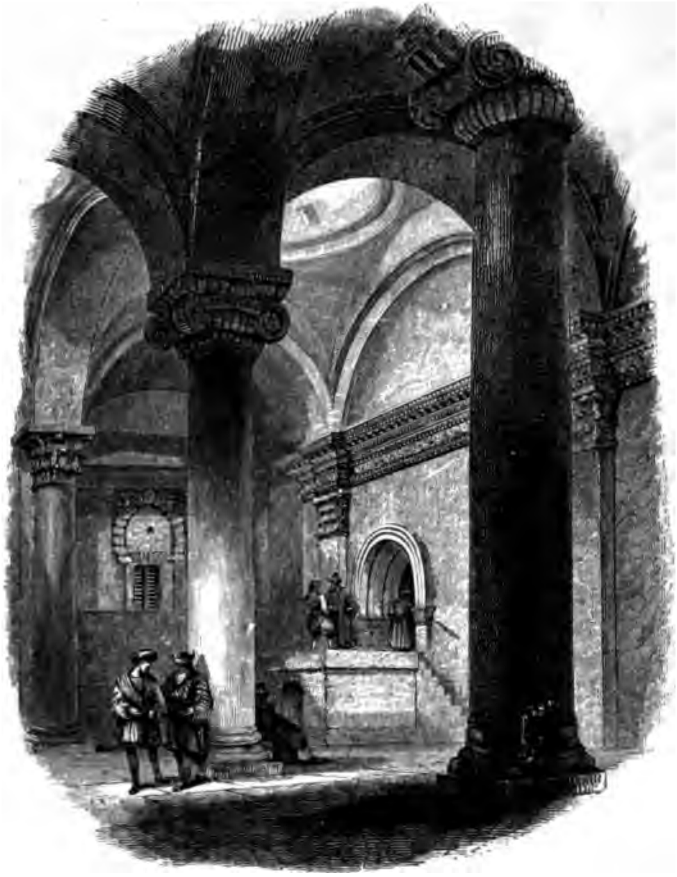
BASILICAS may be subdivided into two classes—that in which the nave is divided from the side-aisles by pillars, carrying either entablatures or arches, as the most purely Romanesque—and that which has piers supporting arches only, and is transitional between the first style and the more original forms which were elaborated out of it.



842. Church of the Nativity at Bethlehem. (From Bernardino Amico.) Scale 100 ft. to 1 inch.

Of the former class one of the most authentic and perfect is that erected at Bethlehem by Helena, the mother of Constantine, in front of the cave of the Nativity. The nave seems to be a nearly unaltered example of this age, with the advantage over the contemporary churches at Rome, that all its pillars and their capitals were made for the places they occupy, whereby the whole possesses a completeness and justness of proportion not found in the metropolis. Its dimensions, though sufficient for effect, are not large, being internally 103 ft. across, by 215 ft. east and west. The choir with its three apses does not seem to be part of the original arrangement, but to have been added by Justinian when he renovated—Eutychius says rebuilt—the church. My impression is that a detached circular building, external to the basilica, originally contained the entrance to the cave. The frescoes were added apparently in the 11th or 12th century.[1]

One of the principal points of interest connected with this church is, that it enables us to realise the description Eusebius gives us of the basilica which Constantine erected at Jerusalem in honour of the Resurrection. Like this church it was five-aisled, but had galleries, and, owing to the irregularity of the ground, the south gallery was on a level with the ground outside, as was the case with the churches of San Lorenzo and Sta. Agnese at Rome. The apse also was on a larger scale than could well have been possible in the Bethlehem church, and adorned with twelve pillars, symbolical of the Apostles.



843. Interior of the Golden Gateway. (From a Drawing by Catherwood. Originally published in Fisher's 'Oriental Album.')

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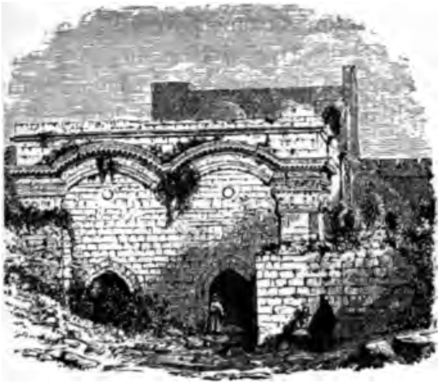
[1] De Vogüé, 'Églises de la Terre Sainte' p. 101.

Of this building nothing now remains above ground[1] but its portal, now known as the Golden Gateway.[2] This, however, is extremely interesting as an example of the style of the age, when practised where ancient materials were not available to be worked up in its design. Both externally and internally it preserves all the elements of transition between a horizontal trabeate style, like the classical Roman, and an arcuate style, which Christian architecture became immediately after its date.[3]



844. Golden Gateway (west side). (From a Photograph.)

THESSALONICA.

As before mentioned, it is to Constantinople, or Alexandria, or Antioch, that we should naturally look to supply us with examples of the style of the early transition, but as these fail, it is to Thessalonica alone—in so far as we now know—that we can turn. In that city there are two ancient examples. One, now known as the Eski Juma or old mosque (Woodcut No. 845), may belong to the 5th century, though there are no very exact data by which to fix its age. It consists of a nave, measuring, exclusive of narthex and bema, 93 ft. across by 120 ft.—very much the proportion of the Bethlehem church, but having only three aisles, the centre one 48 ft. in width. The other church, that of St. Demetrius, is larger, but less simple. It is five-aisled, has two internal transepts, and various adjuncts. Altogether it seems a considerable advance towards the more complicated form of a Christian church. Both these churches have capacious galleries, running above the side-aisles, and probably devoted to the accommodation of the women. The date of St. Demetrius is most probably among the first years of the 6th century.[1] The general ordinance of the pillars will be understood from the woodcut (No. 847). Generally they are placed on elevated bases or stools, like those at Spalatro and in the Dome of the Rock at Jerusalem, and all have a block above the capital, which in the Jerusalem example represents the architrave, but has here become an essential feature placed on the capital to support the springing of the arch. In this form it is found very generally between the age of Constantine and Justinian, but after his reign it fell into disuse. This is not surprising, as it is far from being agreeable, though just such a characteristic as generally occurs in ages of transition.

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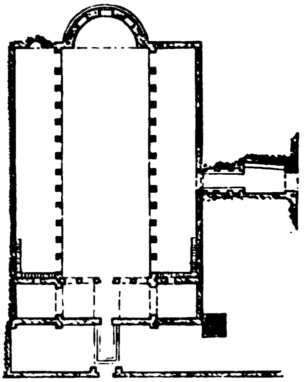
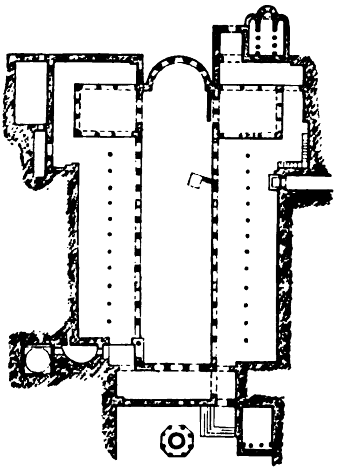
[1] In 1868 Captain Warren made a discovery on the north side of the platform on which the Dome of the Rock stands, which seems to settle the question. In an excavation there he found several piers cut in the rock, with arches between them, exactly on the spot and at the depth at which we would expect to find the substructure of the basilica, from Eusebius' description. The exploration has not been followed up. Whenever it is, it will settle the whole question one way or the other. (See 'Recovery of Jerusalem, London,' 1871, p. 218.)

[2] It now seems to be generally admitted, even by those most opposed to my views in this matter, that this gateway was erected for festal purposes by Christians between the ages of Constantine and Justinian (De Vogüé says 5th to 6th century), but no one has ventured to suggest by whom or for what purpose. Till they can do so they have no *locus standi* in the argument as to the age or destination of these buildings.

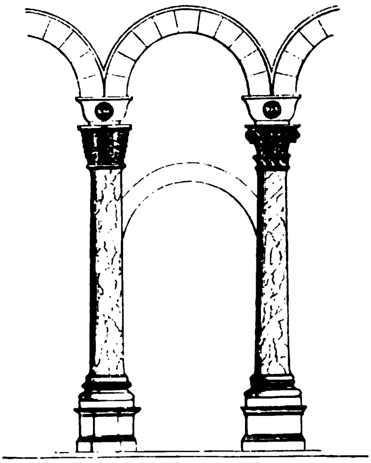
[3] For further particulars see 'The Holy Sepulchre and the Temple at Jerusalem,' by the Author. Murray, 1865.



845. Eski Juma, Thessalonica. (From Texier and Pullan.) Scale 100 ft. to 1 in.



846. St. Demetrius, Thessalonica. (From Texier and Pullan.) Scale 100 ft. to 1 inch.



847. Arches in St. Demetrius at Thessalonica, A.D. 500 to 520.

So far as we now know, there is only one church of this class at Constantinople—that known as St. John Studios,—a three-aisled basilica, 125 ft. long by 85 in width externally. Its date appears to be tolerably well ascertained as A.D. 463, and from this circumstance, as well as its being in the metropolis, it shows less deviation from the classical type than the provincial examples just quoted. The lower range of columns supporting the gallery still retain the classical outline and support a horizontal entablature (Woodcut No. 848); the upper supporting arches have very little resemblance to the classical type, and are wanting in the architrave block, which in fact never seems to have been admired in the capital.

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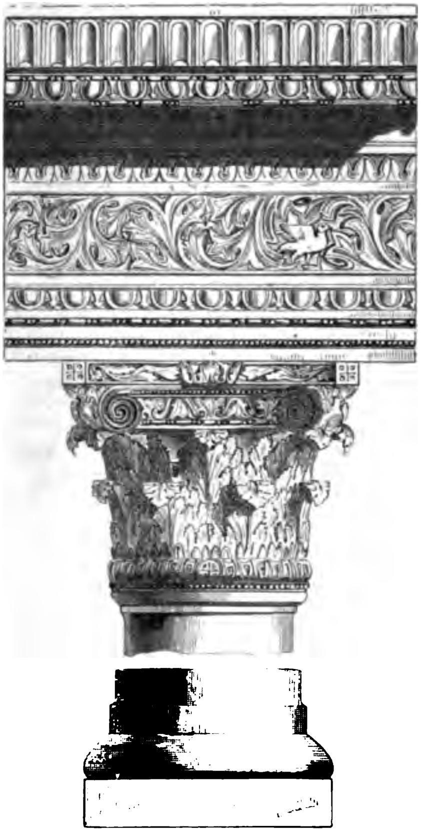
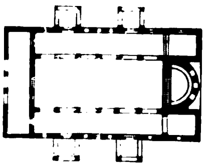
[1] The particulars for these churches are taken from Texier and Pullan's splendid work on Byzantine architecture, published by Day, 1864; but, as will be seen, I differ essentially from the authors as to the dates of the buildings they describe.



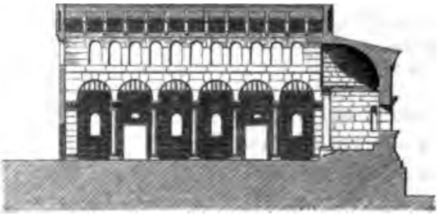
848. Pillar in Church of St. John, Constantinople.

SYRIA AND ASIA MINOR.

The country where—so far at least as we at present know—the Byzantine Basilica was principally developed was Northern Syria. Already in De Vogüé's work, even in its incomplete state, some dozen churches are indicated having the aisles divided from the naves by pillars supporting arches. One of these only—that at Soueideh—has five aisles, all the rest three. Almost all have plain semicircular apses, sometimes only seen internally, like those mentioned in the first volume (page 405), but sometimes also projecting, as was afterwards universally the fashion. Two at least



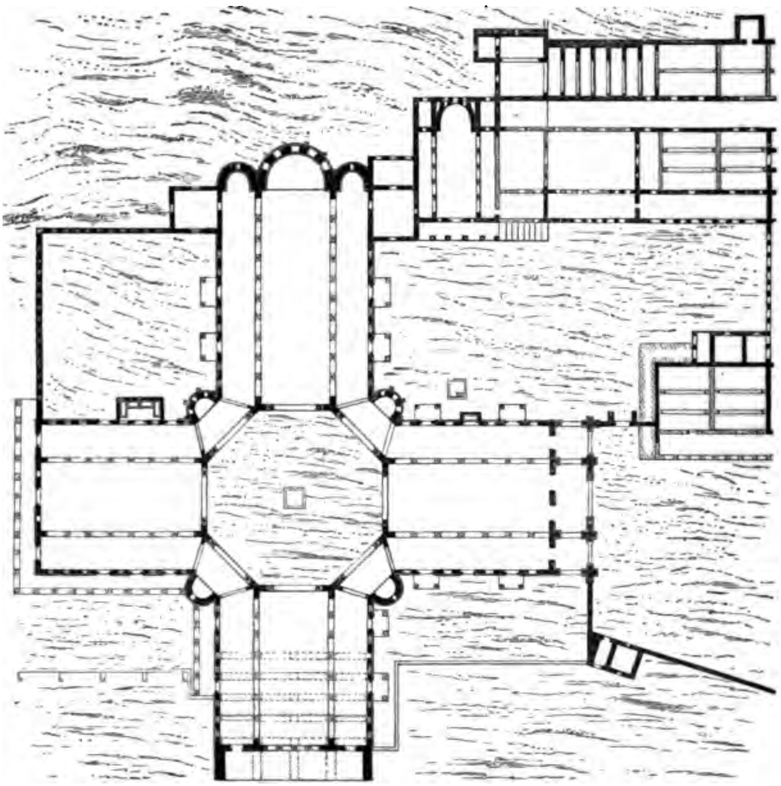
849. Plan of Church in Baquoza. Scale 100 ft. to 1 in.



850. Section of Church at Baquoza. (From De Vogüé.) Scale 50 ft. to 1 in.

have square terminations (Kefr Kileh and Behioh), but this seems exceptional. Most of them are almost the size of our ordinary parish churches—100 ft. by 60, or thereabouts—and all belong to the three centuries—the 4th, 5th, and 6th—of which this chapter especially treats.

The church at Baquoza may serve as a type of the class both in plan and section (Woodcuts Nos. 849, 850). Its dimensions externally are 60 ft. by 105; and besides the narthex—not shown in the section



851. Plan of Church and Part of Monastic Buildings at Kelat Seman. (From De Vogüé.) Scale 100 ft. to 1 in.

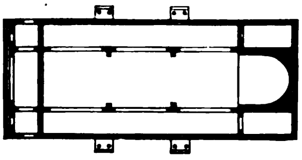
—it has four lateral porches. It has also two square chapels or vestries at the end of the aisles—an arrangement almost universal in these churches.

The most remarkable of the group, however, is that of St. Simeon Stylites, at Kelat Seman, about 20 miles east of Antioch. Its dimensions are very considerable, being 330 ft. long, north and south, and, as nearly as may be, 300 ft. east and west, across what may be called the transepts. The centre is occupied by a great octagon, 93 ft. across, on a rock in the centre of which the pillar of that eccentric saint originally stood. This apparently was never roofed over, but stood always exposed to the air of heaven.[1]

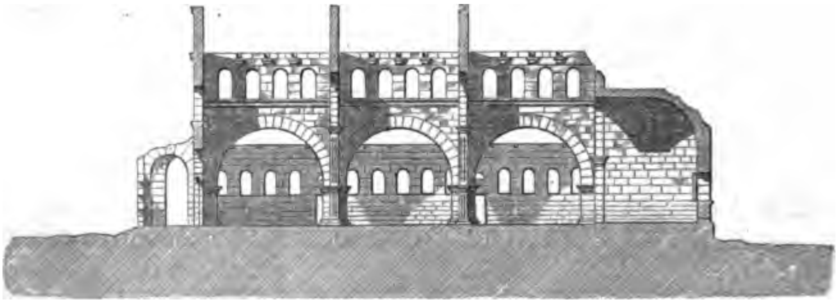
The greater part of the conventual buildings belonging to this church still remain in a state of completeness,—a fact which will be startling to those who are not aware how many of the great religious establishments of Syria still stand entire, wanting only the roofs, which were apparently the only parts constructed of wood.

The whole of the buildings at Kelat Seman seem to have been completed within the limits of the 5th century, and not to have been touched or altered since they were deserted, apparently in consequence of the Mahomedan irruption in the 7th century. The most curious point is that such a building should have remained so long in such a situation, unknown to the Western world; for the notices hitherto published have been meagre and unsatisfactory in the extreme. But we now know that when all the details are made public, they will form by far the most valuable contribution yet offered to our knowledge of the architecture of that age.

In the same province we find also the earliest examples of the use of pier arches in a church to separate the nave from the aisles. These seem to have been currently used in Northern Syria in the 6th century, though not found in the West — at least not used in the same manner — for several centuries later. Generally three such arches only were employed in the length of the nave, and they consequently left the floor so open and free, that it is very questionable if in churches of limited dimensions the introduction of a much larger number by the



852. Plan of Church at Rouheiha. Scale 100 ft. to 1 in.



853. Section of Church at Rouheiha. (From De Vogüé.) Scale 50 ft. to 1 in.

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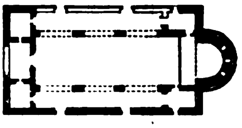
[1] Another very small church, that of Mondjeleia, though under 50 ft. square, seems to have adopted the same hypæthral arrangement.

Gothic architects was an improvement. Taking it altogether, it is probable that such a church as that at Rouheiha (Woodcut No. 853) would, if literally reproduced, make a better and cheaper church for an English parish than the Mediæval models we are so fond of copying. A considerable amount of perspective effect is obtained by throwing two tranverse arches across the nave, dividing it into three compartments, each including four windows in the clerestory; and the whole design is simple and solid in a degree seldom surpassed in buildings of its class. Its dimensions are 63 ft. by 150 over all externally.



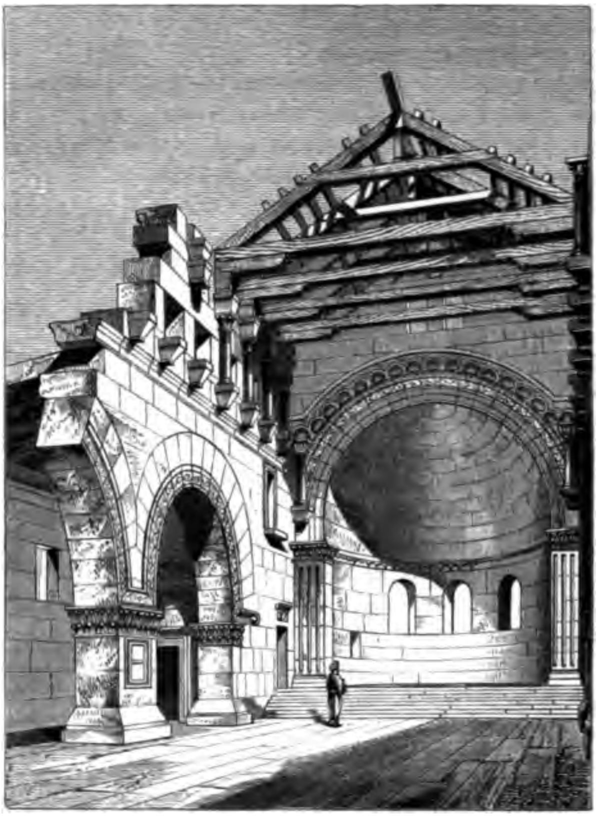
854. Plan of Church at Kalb Louzeh. Scale 100 ft. to 1 in.

In many of these churches the tranverse arches of the nave are omitted; and when, as at Kalb Louzeh (Woodcut No. 855), the clerestory is accentuated by roofing shafts, the same effect of perspective is obtained by other means, and perhaps as successfully. It is very interesting, however, to find that as early as the 6th century the architects were thoughtfully feeling their way towards those very principles of design which many centuries afterwards enabled the Gothic architects to produce their most successful effects. The introduction of four windows over each great arch, and of a roofing-shaft between each to support the beams of the roof, was a happy thought, and it is wonderful it was so completely lost sight of afterwards.

It is probable that the apse (Woodcut No. 855) was originally adorned with paintings or mosaics, or at least that it was intended it should be so ornamented; but even as it is, it is so well proportioned to the size of the church, and to its position, and so appropriately ornamented, that it is better than most of those found in Roman basilicas; and, for a small church, is a more dignified receptacle for the altar than either the French chevet or the English chancel.

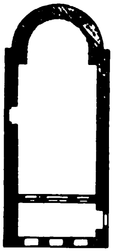
Did our limits admit of it, it would be not only pleasant but instructive to dwell longer on this subject; for few parts of our inquiry can be more interesting than to find that, as early as the 6th century, the Roman basilica had been converted into a Christian church, complete in all its details, and—internally at least—in a style of architecture as consistent and almost as far removed from its classical prototype as the Mediæval Gothic itself.

Externally, too, the style was becoming independent of classical models, though hardly in the same degree. The porches of the churches were generally formed in two storeys, the lower having a large central arch of admission, the upper consisting of a colonnade which partially hid, while it supported, an open screen of windows that admitted a flood of light into the nave just in the position where it was most effective. Without glass or mullions such a range of windows must have appeared weak, and would have admitted rain; but when sheltered by a screen of pillars, it was both convenient and artistic.



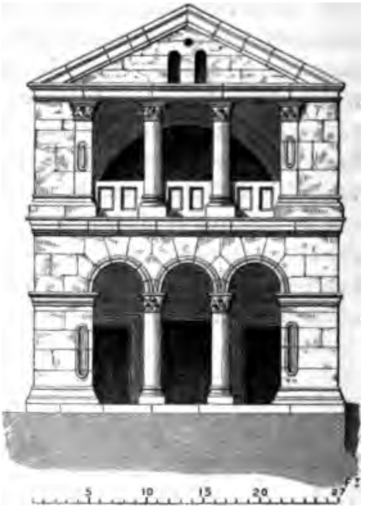
855. Apse of Church at Kalb Louzeh. (From De Vogüé.)

This mode of lighting is better illustrated at Babouda, where it is employed in its simplest form. No light is admitted to the chapel except through one great semi-circular window over the entrance, and this is protected externally by a screen of columns. This mode of introducing light, as we shall afterwards see, was common in India at this age, and earlier, all the Chaitya caves being lighted in the same manner; and for artistic effect it is equal, if not superior, to any other which has yet been invented. The light is high, and behind the worshipper, and thrown direct on the altar, or principal part of the church. In very large buildings it could hardly be applied, but for smaller ones it is singularly effective.



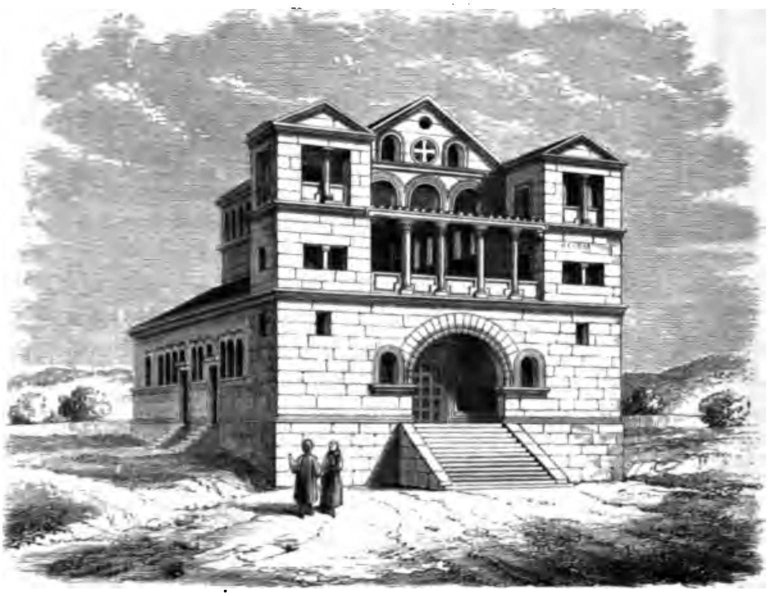
856. Chapel at Babouda.
Scale 50 ft. to 1 in.

The external effect of these buildings though not so original as the interior, is still very far removed from the classical type, and presents a variety of outline and detail very different from the simplicity of a Pagan temple. One of the most complete is that at Tourmanim (Woodcut No. 858), though that at Kalb Louzeh is nearly as perfect, but simpler in detail. For a church of the 6th century it is wonderful how many elements of later buildings it suggests; even the western towers seem to be indicated, and, except the four columns of the gallery, there is very little to recall the style out of which it arose.



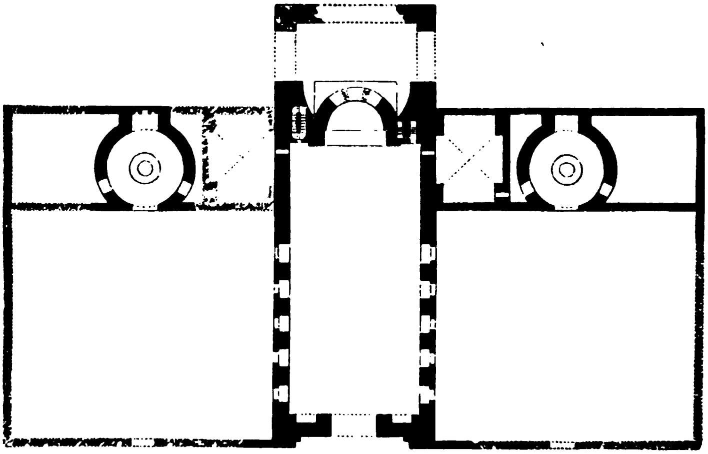
857. Elevation of Chapel at Babouda. (From De Vogüé.)

There are considerable remains of a wooden-roofed basilica at Pergamus, which may be even older than those just described; but having been built in brick, and only faced with stone—the whole of which is gone—it is difficult to feel sure of the character of its details and



858. Façade of Church at Tourmanim. (From De Vogué.)

mouldings. It had galleries on either side of the nave, but how these were supported or framed is not clear. It may have been by wooden posts or marble pillars, and these would have either decayed or been removed. The two square calcidica or vestries, which in the Syrian churches terminate the side-aisles, are here placed externally like transepts, and beyond them are two circular buildings with domical roofs and square apses. What their use was is, however, doubtful. In fact, we know so little of the architecture of that age in Asia Minor that this building stands quite exceptionally; and very little use can be made of it, either as throwing light on other buildings, or as receiving illustration from their peculiarities. But seeing how much has been effected in this direction of late, we may fully hope that this state of isolation will not long remain.



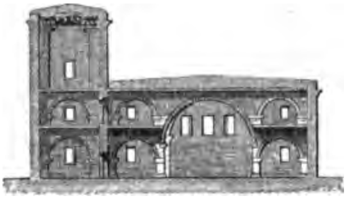
859. Church at Pergamus. (From a Plan by Ed. Falkener, Esq.) Scale 100 ft. to 1 in.

One other church of the 4th century is known to exist—at Nisibin. It is a triple church, the central compartment being the tomb of the founder, the first Armenian bishop of the place. Though much ruined, it still retains the mouldings of its doorways and windows as perfect as when erected, the whole being of fine hard stone. These are identical in style with the buildings of Diocletian at Spalatro, and those of Constantine at Jerusalem; and as their date is well known, they will, when published, form a valuable contribution to the information we now possess regarding the architecture of this period.

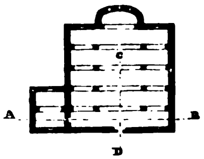
Churches with Stone Roofs.

All the buildings above described—with the exception of the chapel at Babouda—have wooden roofs, as was the case generally with the basilicas and the temples of the classical age. The Romans, however, had built temples with aisles and vaulted them as early as the age of Augustus, as at Nîmes, for instance (Woodcut No. 189), and they had roofed their largest basilicas and baths with intersecting vaults. We should not therefore feel surprised if the Christians sometimes attempted the same thing in their rectangular churches, more especially as the dome was always a favourite mode of roofing circular buildings; and the problem which the Byzantine architects of the day set themselves to solve was—as we shall presently see—how to fit a circular dome of masonry to a rectangular building.

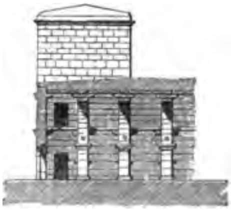
One of the earliest examples of a stone-roofed church is that at Tafkha in the Hauran. It is probably of the age of Constantine, though as likely to be before his time as after it. Its date, however, is not of very great importance, as its existence does not prove that the form was adopted from choice by the Christians: the truth being that, in the country where it is found, wood was never used as a building material. All the buildings, both domestic and public, are composed wholly of stone—the only available material for the purpose which the country afforded. In consequence of this, when that tide of commercial prosperity which rose under the Roman rule flowed across the country from the Euphrates valley to the Mediterranean, the inhabitants had recourse to a new mode of construction, which was practically a new style of architecture. This consisted in the employment of arches instead of beams. These were placed so near one another that flat stones could be laid side by side from arch to arch. Over these a layer of concrete was spread, and a roof was thus



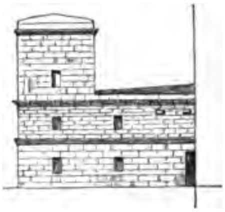
860. Section on A B, Tafkha. (From De Vogüé.)
Scale 50 ft. to 1 in.



861. Plan, Tafkha.
Scale, 100 ft. to 1 in.



862. Section on C D, Tafkha.



863. Half Front Elevation, Tafkha.
Scale 50 ft. to 1 in.

formed so indestructible that whole towns remain perfect to the present day, as originally constructed in the first centuries of the Christian era.[1]

One example must suffice to explain this curious mode of construction. The church at Tafkha is 50 ft. square, exclusive of the apse. It is spanned by four arches, 7 ft. 6 in. apart. On each side are galleries of flat slabs resting on brackets, as shown in Woodcuts Nos. 860, 862, which again are supported by smaller transverse arches. At one side is a tower, but this is roofed wholly by bracketing, as if the architect feared the thrust of the arch even at that height.

The defect of this arrangement as an architectural expedient is the extreme frequency of the piers, 8 or 10 feet being the greatest distance practicable, but as a mechanical expedient it is singularly ingenious. More internal space is obtained with a less expenditure of material and danger from thrust than from any mode of construction—wholly of stone—that we are acquainted with; and with a little practice it might no doubt be much improved upon. The Indian architects, as we shall presently see, attempted the same thing, but set about it in a diametrically opposite way. They absolutely refused to employ the arch under any circumstances, but bracketed forward till the space to be covered was so limited that a single stone would reach across. By this means they were enabled to roof spaces 20 or 25 ft. span without arches, which is about the interval covered with their aid at Tafkha.[1]

Another circumstance which renders these Hauran examples interesting to the architectural student is that they contain no trace or reminiscence of wooden construction or adornment, so apparent in almost every other style. In Lycia it is absurdly so. In Egypt, in Greece, in India, in Persia—everywhere, in fact—we can trace back the principal form of decoration to a wooden original; here alone all is lithic, and it is probably the only example of the sort that the whole history of architecture affords.

If there are any churches in the Byzantine province of the age of which we are treating, whose naves are roofed by intersecting vaults, they have not yet been described in any accessible work; but great tunnel-vaults have been introduced into several with effect. One such is found at Hierapolis, on the borders of Phrygia (Woodcut No. 864). It is divided by a bold range of piers into three aisles, the centre one having a clear width of 45 ft. 6 in. The internal dimensions of the church are 177 ft. by 115. There are three great piers in the length, which carry bold transverse ribs so as to break the monotony of the vault, and have between them secondary arches, to carry the galleries.

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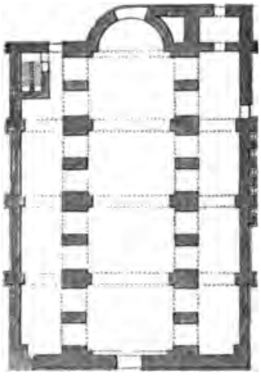
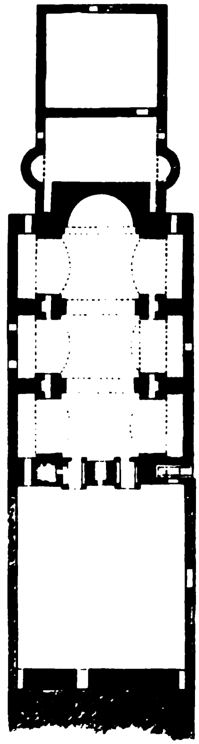
[1] A great deal of very irrelevant matter has been written about these "giant cities of Bashan,' as if their age were a matter of doubt. There is nothing in the Hauran which can by any possibility date before the time of Roman supremacy in the country. The very earliest now existing are probably subsequent to the destruction of Jerusalem by Titus.

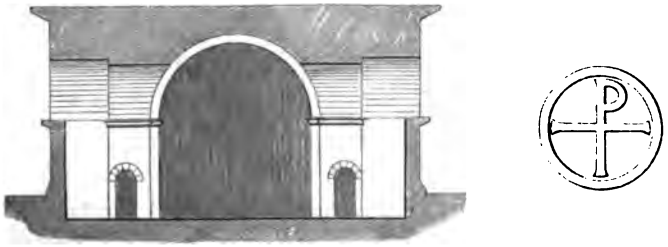
[2] The constructive dimensions of the porch at Chilumbrum (further on) are very similar to those of this church: both have flat stone roofs, but in the Indian, though a much more modern example, there is no arch.

There is another church at the same place, the roof of which is of a somewhat more complicated form. The internal length, 140 ft., is divided into three by transverse arches; but its great peculiarity is that the vault is cut into by semi-circular lunettes above the screen side-walls, and through these the light is introduced. This arrangement will be understood from the section (Woodcut No. 866). Taken altogether, there is probably no other church of its age and class in which the vault is so pleasingly and artistically arranged, and in which the mode of introducing the light is so judicious and effective.


864. Great Church at Hierapolis. Scale 100 ft. to 1 in. (E. Falkener del.)


865. Church at Hierapolis. Scale 100 ft. to 1 in. (E. F. del.)

The age of these two last churches is not very well ascertained. They probably belong to the 5th, and are certainly not later than the 6th, century; but, before we can speak with certainty on the subject, more examples must be brought to light and examined. From our present knowledge it can hardly be doubted that a sufficient number do exist to complete the chapter; and it is to be hoped they will be published, since a history of vaults in the East, independent of domes, is still a desideratum.


866. Section of Great Church at Hierapolis. Scale 50 ft. to 1 in. With monogram found on its walls. (From a Drawing by E. Falkener.)

CHAPTER III.

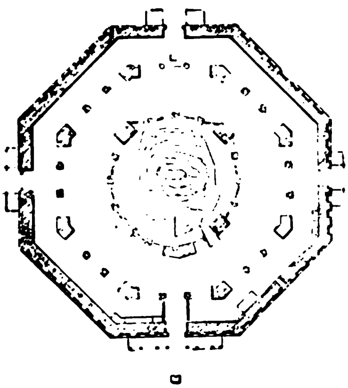
CIRCULAR OR DOMICAL BUILDINGS.

CONTENTS.

Circular Churches with wooden roofs and with true domes in Syria and Thessalonica — Churches of St. Sergius and Bacchus and Sta. Sophia, Constantinople — Domestic Architecture.

As before hinted, all the churches described in the last chapter might fairly be described as Romanesque, and, if our history stopped there, Eastern Romanesque would be the proper title to apply to them. At the time of their erection, however, a circular domical style was being simultaneously elaborated, which not only gave a different character to the whole style, but eventually entirely superseded the Romanesque form, and became an original and truly Byzantine art.

As was the case with the rectangular buildings, those of the circular form may be divided into two distinct classes, those having wooden and those possessed of stone roofs. In this case, however, the proportions are reversed: the stone-roofed circular buildings being by far the most numerous; the wooden, on the contrary, exceptional.



867. Plan of the Dome of the Rock at Jerusalem. (From Catherwood and Arundale.) Scale 100 ft. to 1 in.

The typical example of the latter class is the church which Constantine erected over what he believed to be the Holy Sepulchre of Christ at Jerusalem. This building is now known to the Moslem world as the "Dome of the Rock" (Kubbet es Sakhra); by Western Christians it is called the "Mosque of Omar." In reality it is a nearly unaltered Christian building of the 4th century.[1] As such, its interest to the Christian, in marking what is to him one of the most sacred spots in the whole world, is, or ought to be immense. It is equally important to the archæologist as being the earliest important church of its class erected wholly for Christian purposes; while it is of even more value to the architect from being one of the most beautiful buildings in the whole world. In dimensions it is surpassed by many, being an octagon of only 160 ft. diameter; and in solidity it is not to be compared with those wholly constructed of stone; but in richness of material there are few that can be compared with it. Its pillars are of marbles of the most precious kinds, and either belonged to the Temple of Herod or to that erected by Hadrian in honour of Jupiter on the same spot.[1] Its Mosaics are complete, though very much altered in design by its present possessors, who have added painted glass in the windows, of patterns more beautiful and colours more exquisite than any to be found in our Northern cathedrals. The design of this church is also singularly appropriate to the purposes for which it was erected. The Emperor's orders were, "That a House of Prayer should be erected round the Saviour's tomb on a scale of rich and lavish magnificence, which may surpass all others in beauty; and that the details of the building be such that the finest structure in any city of my empire may be excelled by this."[2] No orders were ever more literally or more successfully obeyed. The details still retain much of their classical purity and elegance, but combined with something

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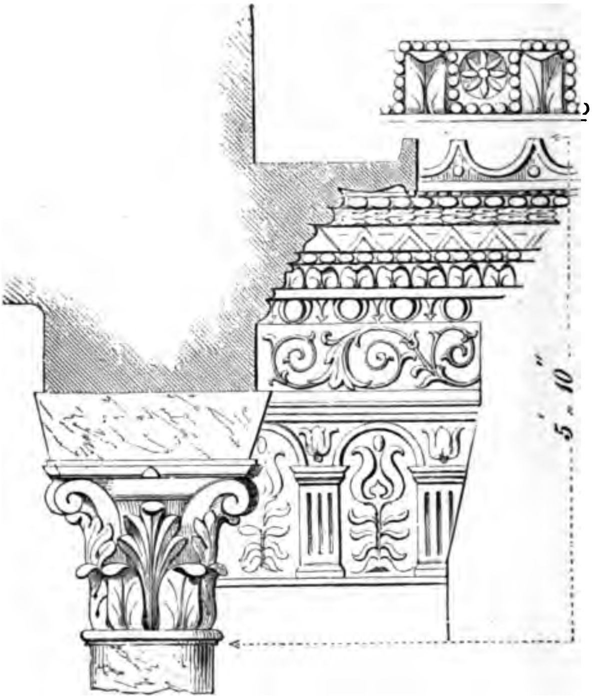
[1] For the arguments on which this assertion is based the reader is referred to the essay on 'The Ancient Topography of Jerusalem,' by the Author, published in 1847, and to a work entitled 'The Holy Sepulchre and the Temple at Jerusalem.' Murray, 1865.



868. Order of the Dome of the Rock. (From a Drawing by Arundale.)

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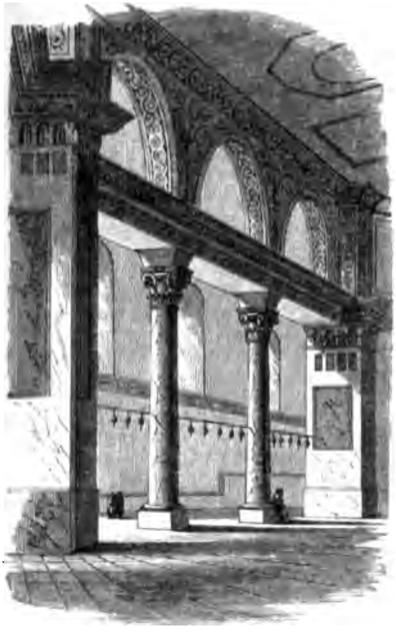
[1] It is difficult to suppose that such precious marbles lay about unappropriated till the end of the 7th century, long after the time when both Constantine and Justinian had been so busy erecting churches and other buildings in the Holy City.

[2] Eusebius, 'Vita Constantini,' l.b. iii. ch. xxv.

of mediæval variety and richness; and the effect produced by the whole is quite unrivalled by any other known building of its class. It has not of course the splendour and magnificence arising from the vastness and constructive beauty of such a church as Sta. Sophia at Constantinople, but for its dimensions there is probably no church in the whole world the design of which is at the same time so beautiful and so appropriate for the purposes for which it is erected. There is a grace about its proportions and a richness combined with solemnity about its decorations which the Saracens did not even dream of imitating till late in the 10th century, and have in fact never reached even to the present day, but which the age of Constantine was capable of producing, and has produced in such perfection that no church since built with the same dimensions has surpassed, or even equalled, this most sacred church of Christendom.



869. View in Aisle of Dome of Rock. (From a Drawing by Catherwood.)

To the archæologist its principal interest lies in the number of transitional features it presents. The old trabeate style of the Romans was yielding unwillingly to the arcuate style that was so soon to supersede it. The former is still retained as an ornament; the latter—as in the palace of Diocletian at Spalatro (vol. i. p. 304)—was fast becoming the essential constructive expedient.[1]

Though the shafts of the columns seem to have been generally borrowed from older buildings, the capitals were apparently carved for the nonce. They are nearly identical with those employed in the basilica at Bethlehem, and some of them still retain the cross on the abacus (Woodcut No. 870). My impression is that most of them were so adorned, but the emblem is covered up with plaster. As a rule, the bases of the pillars are cubical blocks, such as were introduced at Spalatro by Diocletian, and continued fashionable down, at least, to the time of Justinian. They are always employed at Thessalonica (Woodcut No. 847).

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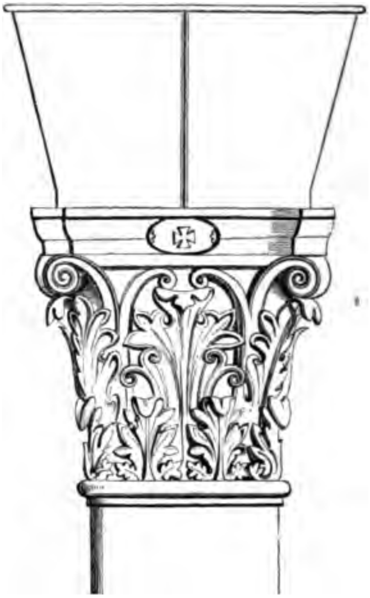
[1] During the present year, in executing some repairs to the Dome of the Rock, the tiles that covered the whole of the upper part have been stripped off and revealed the original architecture of Constantine in all its purity and simplicity. The windows in the middle storey are all shown to be round-arched, and above these is an arcade of 13 small circular arches, separated each by two small columns with square capitals, identical with those in the cistern of Philoxenus, built in Constantine's time at Constantinople. An elevation of the mosque as now revealed has just been published in the Quarterly Statement of the Palestine Exploration Fund for July, from drawings by M. Le Comte.



870. Capital in Dome of Rock. (From De Vogüé.)

If we were to form an opinion from the constructive details only, there would be no difficulty in assigning this building to an earlier age than even that of Constantine; but, taking both the mechanical and artistic details into consideration, it is impossible to place its erection before the age of that monarch, and it seems absolutely certain that the same features were never reproduced in any building erected after the accession of Justinian.

Constantine also erected a church at Antioch, which, from the description of it preserved by Eusebius, we learn was octagonal in plan, and probably similar but less rich and less important than that at Jerusalem.

On Mount Gerizim, on or near the site of the Samaritan temple, Justinian built an octagonal church, in plan somewhat similar to the Dome of the Rock at Jerusalem, though exhibiting a considerable advance towards Christian arrangements; it has, however, been so completely destroyed that only its foundations can now be recovered.[1]

At Bosrah in the Hauran there is a church of perfectly well-ascertained date—A.D. 512—which, when more completely illustrated, will throw considerable light on the steps by which a Pagan temple was transformed into a Christian church.[2] It is a building externally square, but internally circular (Woodcut No. 871). The central space is 91 ft. in diameter, and was evidently covered with a wooden roof, but whether supported on eight piers, or covering the whole space in one span, is not clear. The great interest of the plan consists in its showing the progress made in adapting this form to Christian purposes, during the 180 years which had elapsed since the Dome of the Rock was erected at Jerusalem. That has no apse or sanctuary, and is in every essential a Pagan building, in so far as any disposition of the plan is concerned; this is a Christian church in every essential respect.

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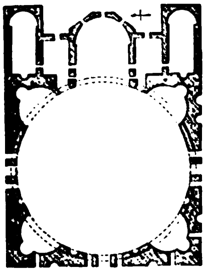
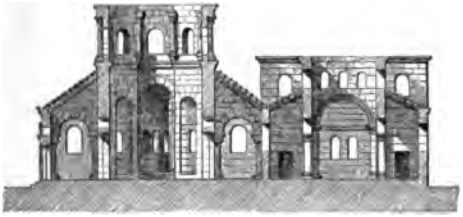
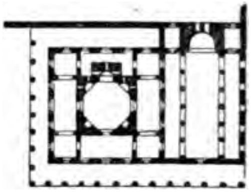
[1] A plan of the church, resulting from excavations and measurements very carefully made, was brought home by Capt. Wilson of the Palestine Exploration Fund.

[2] The plan here introduced was made by M. Rey. It is hoped that when De Vogüé's work is complete we shall know more about it.


871. Cathedral at Bosrah. Scale 100 ft. to 1 in.

It is to be hoped that further investigation may enable us to supply all the steps by which this transformation took place. Meanwhile one, and a very curious one, exists at Kelat Semân, in Northern Syria, and presents a combination of a circular with a rectangular church very common in Armenia and Georgia. As is generally the case there, they are very small in dimensions, the whole group only measuring 120 ft. by 73. When De Vogüé's text is published, we shall probably know the purpose for which these buildings were erected. At present they look like a tomb and its accompanying mortuary chapel, disposed as the Martyrium and Anastasis of Constantine were at Jerusalem: but on this and many other points we must wait for further information before speaking positively.


872. Section of Double Church at Kelat Semân. (From De Vogüé.) Scale 50 ft. to 1 in.

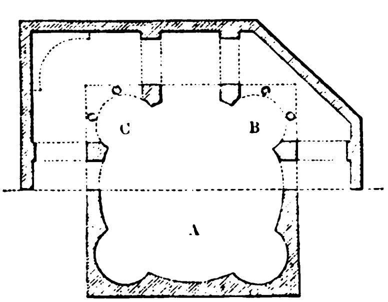

873 Plan, Kelat Semân. Scale 100 ft. to 1 in.

CHURCHES WITH DOMES.

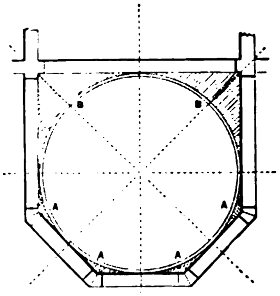
Whether the Dome of the Pantheon at Rome (vol. i. p. 310) was erected in the time of the Antonines, or before the time of Augustus, as is generally supposed, it is evident that the Romans had conquered the difficulties of domic construction long before the transference of the seat of power to Byzantium; the Pantheon being, up to this hour, the largest (single) dome ever constructed by the hand of man. Simple and grand as it undoubtedly is, it had several glaring defects in its design which the Byzantines set themselves to remedy. The first was that twice the necessary amount of materials was consumed in its construction. The second, that the mode of lighting by a hole in the roof, which also admitted the rain and the snow, was most objectionable before the invention of glass. The third, that a simply circular plan is always unmeaning and inconvenient. A fourth, that a circular building can hardly, by any contrivance, be made to fit on to any other buildings or apartments.

In the Minerva Medica (Woodcut No. 227) great efforts were made, but not quite successfully, to remedy these defects. The building would not fit on to any others, and, though an improvement on the design of the Pantheon, was still far from perfect.

The first step the Byzantines made was to enclose the circle in a square, as A (Woodcut No. 874), and then to insert a great niche in each of the angles. By this means, the thickness of the outer walls was very considerably reduced, and the whole square was practically utilized. A second step was to cut away as much as possible of the outer wall, leaving only what was requisite to support the dome, and enclosing the whole in an octagon, as at B, or a square, as at C. When this was done, it is evident that a church of any required dimensions could be constructed without serious effort, and great variety of perspective obtained without affectation. The octagonal arrangement in the last woodcut was that adopted at St. Vitale at Ravenna; the square, that which produced the church of SS. Sergius and Bacchus at Constantinople. So long as the octagonal arrangement was adhered to, no difficulty of construction occurred; the difference between the circle and octagon, represented by the shaded parts at A in the diagram (Woodcut No. 875), is so small, that it is easily got over in construction, but such a polygon has many of the architectural defects of the circle, and the triumph of the Byzantine architects was complete, when, by the introduction of pendentives—represented by the shaded parts at B (Woodcut No. 875), they were enabled to place the circular dome on a square apartment.

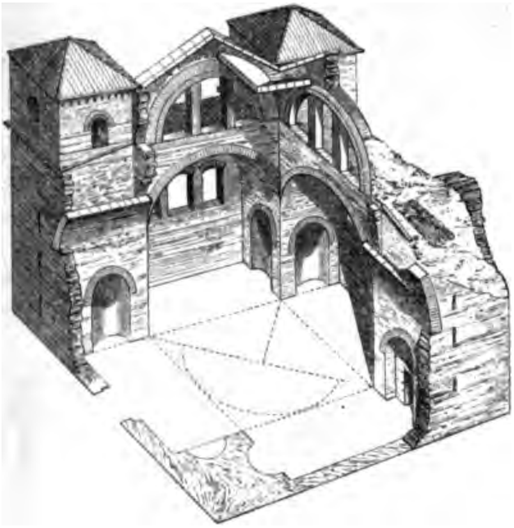


874. Diagram of Byzantine Arrangement.



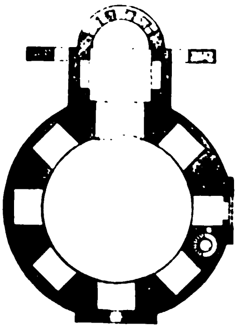
875. Diagram of Byzantine Pendentives.

Constructively it would probably have been easier to roof the space by an intersecting vault. Even if of 100 or 150 ft. span, it could without difficulty have been effected by the arrangement shown in the annexed diagram (Woodcut No. 876).



876. Diagram of Vaulting. (From Viollet le Duc, 'Entretiens d'Architecture.')

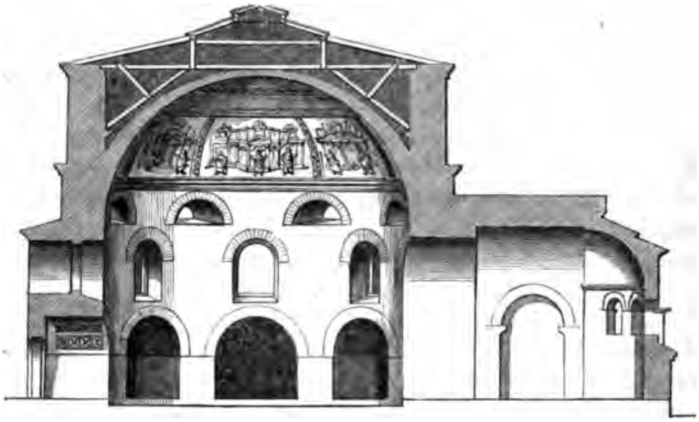
The difference between the intersecting vault and the dome, as applied in this instance, is perhaps the most striking contrast the history of architecture affords, between mechanical and ornamental construction. Both are capable of being ornamented to the same extent and in the same manner; but the difference of form rendered the circular dome a beautiful object in itself, wholly irrespective of ornament, while nothing in the architect's repertory could redeem the mechanical harshness of a single vault, when applied on the scale requisite to roof an apartment of any considerable dimensions. Altogether, the effect would have been architecturally so infinitely inferior, that we cannot but feel grateful to the Byzantines that they persevered in spite of all mechanical temptations till they reached the wonderful perfection of the dome of Sta. Sophia.



877. Plan of St. George at Thessalonica. Scale 100 ft. to 1 in.

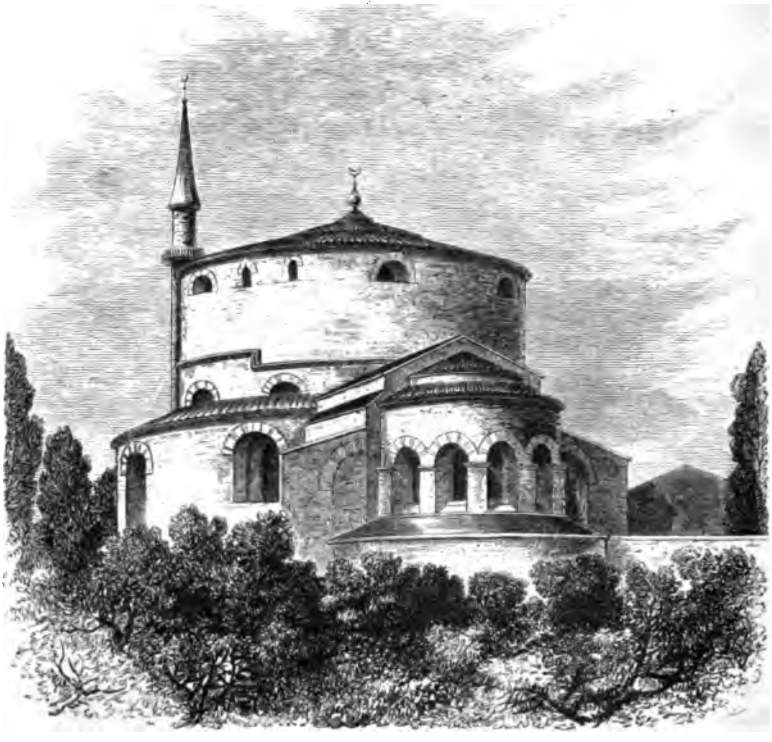
Among the earliest domical churches found in the East, is that of St. George at Thessalonica. It is also, perhaps, the finest example of its class, belonging strictly to that group which has been designated above as the Eastern Romanesque.

As will be seen from the plan, it is a circular apartment, 79 ft. in diameter, surrounded by walls 20 ft. in thickness, into which are cut seven great niches; two apparently serving as entrances, opposite one of which is a bema or presbytery of considerable importance and purely Christian form.



878. Section of Church of St. George at Thessalonica. (From Texier and Pullan.) Scale 50 ft. to 1 in.

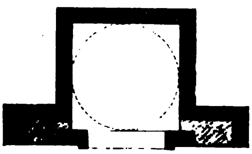
The dome is hemispherical, pierced at its base by eight semi-circular lunettes, and externally covered and concealed by a wooden roof.



879. View of Church of St. George at Thessalonica. (From Texier and Pullan.)

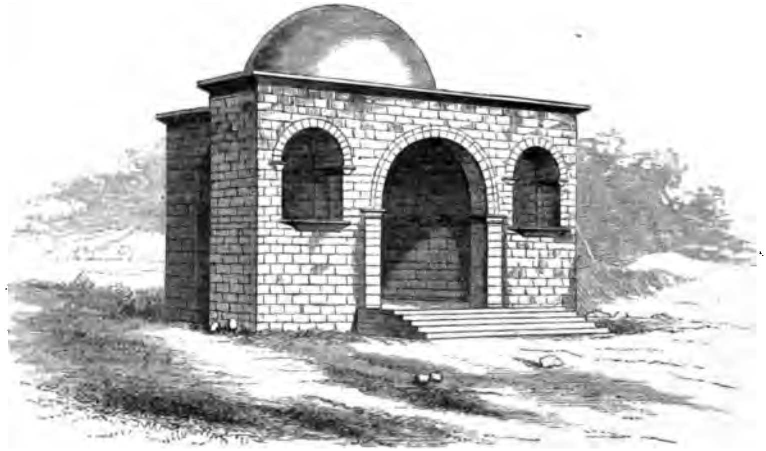
This form of roof is first found in the West at Nocera dei Pagani (vol. i. p. 434), but the dome there is only half the diameter of this one, and of a very different form and construction. The dome of St. George's retains its internal decorations, which are among the earliest as well as the most interesting Christian mosaics in existence.[1] The architecture presented in them bears about the same relation to that in the Pompeiian frescoes, which the Jacobæan does to classical architecture, and, mixed with Christian symbols and representations of Christian saints, makes up a most interesting example of early Christian decoration.

No inscriptions or historical indications exist from which the date of the church can be fixed. We are safe, however, in asserting that it was erected by Christians, for Christian purposes, subsequently to the age of Constantine. If we assume the year 400 as an approximate date we shall probably not err to any great extent, though the real date may be somewhat later.



880. Plan of Chapel at Kalybé. No Scale.

How early a true Byzantine form of arrangement may have been introduced, we have no means of knowing; but as early as the year 285—according to De Vogüé—we have a little chapel at Kalybé (in Syria), which contains all the elements of the new style. It is square in plan, with a circular dome in its centre for a roof. The wing walls, which extend the façade, are curious, but not singular. One other



881. View of Oratory at Kalybé. (From De Vogüé.)

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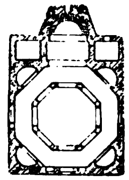
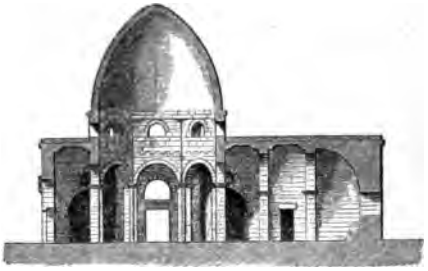
[1] These are all given in colours in Texier and Pullan's beautiful work on Byzantine architecture, from which all the particulars regarding this church are taken.

example, at least, is found in the Hauran, at Chagga, and there may be many more.

Still, in the Hauran they never seem quite to have fallen into the true Byzantine system of construction, but preferred one less mechanically difficult, even at the expense of crowding the floor with piers. In the church at Ezra, for instance, the internal octagon is reduced to a figure of sixteen sides, before it is attempted to put a dome upon it, and all thought of beauty of form, either internally or externally, is abandoned in order to obtain mechanical stability—although the dome is only 30 ft. in diameter.



882. Plan of Church at Ezra. Scale 100 ft. to 1 in.



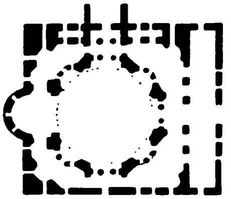
883. Section of Church at Ezra. Scale 50 ft. to 1 in.

As the date of this church is perfectly ascertained (510) it forms a curious landmark in the style just anterior to the great efforts Justinian was about to make, and which forced it so suddenly into its greatest, though a short-lived, degree of perfection.

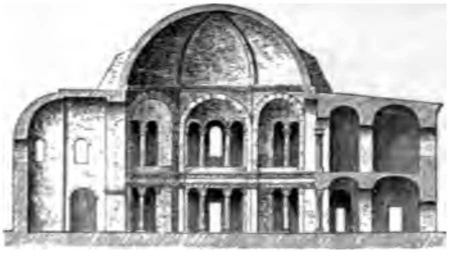
CONSTANTINOPLE.

As before mentioned, all the churches of the capital which were erected before the age of Justinian, have perished, with the one exception of that of St. John Studios mentioned above (page 421). This may in part be owing to the hurried manner in which they were constructed, and the great quantity of wood consequently employed, which might have risked their destruction anywhere. It is, however, a curious, but architecturally an important, fact that Byzantium possessed every conceivable title to be chosen as the capital of the Empire, except the possession of a good building-stone, or even apparently any suitable material for making good bricks. Wood seems in all times to have been the material most readily obtained and most extensively used for building purposes, and hence the continual recurrence of fires, from before the time of Justinian down to the present day. That monarch was the first who fairly met the difficulty; the two churches erected during his reign which now exist, are constructed wholly without wood or combustible materials of any sort—and hence their preservation.

The earliest of these two, popularly known as the "Kutchuk Agia Sophia," or lesser Sta. Sophia, was originally a double church, or more properly speaking two churches placed side by side, precisely in the same manner as the two at Kelat Semân (Woodcut No. 872). The basilica was dedicated to the Apostles Peter and Paul; the domical church, appropriately, to the Martyrs Sergius and Bacchus. The former has entirely disappeared, from which I would infer that it was constructed with pillars and a wooden roof.[1] The latter remains very nearly intact. The frescoes and mosaics have, indeed, disappeared from the body of the church, hidden, it is to be hoped, under the mass of whitewash which covers its walls—in the narthex they can still be distinguished.

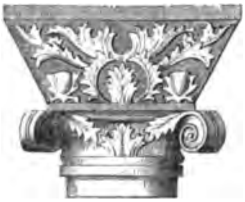


884. Church of Sergius and Bacchus. Scale 100 ft. to 1 in.

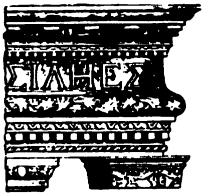


885. Section of Church of Sergius and Bacchus. (From A. Lenoir, 'Architecture Monastique.') Scale 50 ft to 1 in.

The existing church is nearly square in plan, being 109 ft. by 92 over all, exclusive of the apse, and covering only about 10,000 sq. ft. It has consequently no pretensions to magnificence on the score of dimensions, but is singularly elegant in design and proportion. Internally, the arrangement of the piers of the dome, of the galleries, and of the pillars which support them, are almost identical with those of St. Vitale at Ravenna, but the proportions of the Eastern example are



886. Capital from Church of Sergius and Bacchus. (From Lenoir.)



887. Entablature from Church of Sergius and Bacchus. (From Lenoir.)

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[1] A restoration of the church from Procopius's description, 'De Ædificiis,' lib. i. ch. iv., will be found in Hubsch, 'Altchristliche Baukunst,' pls. xxxii. and xxxiii. I differ; but the data are very insufficient.

better, being 66 ft in height by 52 in diameter, while the other, with the same diameter, is nearly 20 ft. higher, and consequently too tall to be pleasing. The great difference, however, is, that while St. Vitale is enclosed in an octagon, St. Sergius is in a square; which gives the latter an immense advantage over its rival, not only in effect but also in accommodation.

The details of this church are generally well designed for the purposes to which they are applied. There is a certain reminiscence of classical feeling in the mouldings and foliage—in the latter, however, very faint. The architrave block (No. 886) had by this time almost superseded the capital, and what was once a classical entablature retained very little of its pristine form (No. 887), and indeed was used constructively only, for the support of a gallery, or some such mechanical requirement. The arch had entirely superseded it as an ornamental feature long before the age of Justinian.

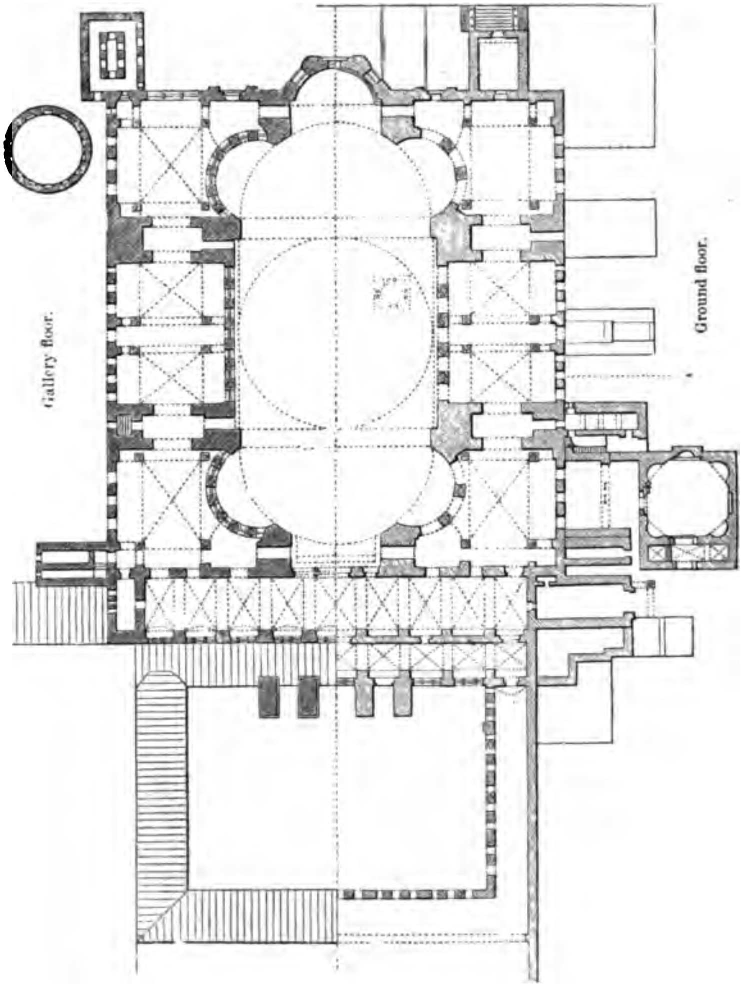
STA. SOPHIA.

Although the building just described, and others that might be quoted, probably contain the germs of all that is found in Sta. Sophia, they are on so small a scale that it is startling to find Justinian attempting an edifice so grand, and so daring in construction, without more experience than he appears to have obtained. Indeed so exceptional does this great structure appear, with our present knowledge, that we might almost feel inclined at first sight to look upon it as the immediate creation of the individual genius of its architect, Anthemius of Thralles; but there can be little doubt that if a greater number of contemporary examples existed we should be able to trace back every feature of the design to its origin. The scale, however, on which it was carried out was certainly original, and required great boldness on the part of the architect to venture upon such a piece of magnificence. At all events, the celebrated boast of its founder on contemplating his finished work was more than justified. When Justinian exclaimed, " I have surpassed thee, O Solomon," he took an exaggerated view of the work of his predecessor, and did not realize the extent to which his building excelled the Jewish temple. The latter was only equal to a small church with a wooden roof supported by wooden posts, and covering some 7200 sq. ft. Sta. Sophia covers ten times that area, is built of durable materials throughout, and far more artistically ornamented than the temple of the Jews ever could have been. But Justinian did more than accomplish this easy victory. Neither the Pantheon nor any of the vaulted halls at Rome equal the nave of Sta. Sophia in extent, or in cleverness of construction, or in beauty of design. Nor was there anything erected during the ten centuries which elapsed from the transference of the capital to Byzantium till the building of the great mediæval cathedrals which can be compared with it. Indeed it remains even now an open question whether a Christian church exists anywhere, of any age, whose interior is so beautiful as that of this marvellous creation of old Byzantine art.

The original church of Sta. Sophia which had been erected by Constantine was, it seems, burnt to the ground in the fifth year of Justinian, A.D. 532, when he determined to re-erect it on the same spot with more magnificence and with less combustible materials. So rapidly were the works pushed forward, that in six years it was ready for dedication, A.D. 537. Twenty years afterwards a portion of the dome fell down in consequence of an earthquake; but this damage was repaired, and the church re-dedicated, 563, in the form, probably very nearly, in which we now find it.

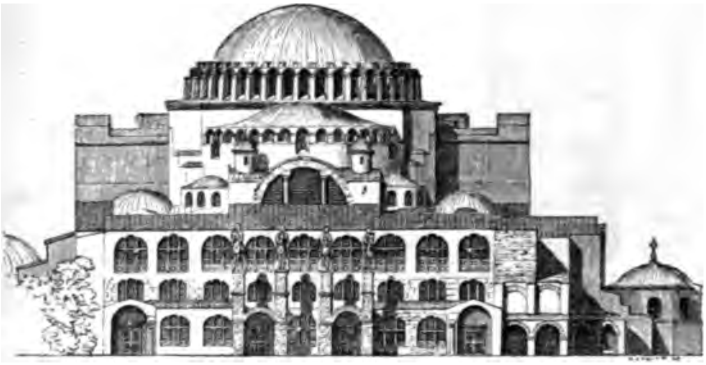
In plan it closely approaches an exact square, being 235 ft. north and south by 250 east and west, exclusive of the narthex and apse. The narthex itself is a splendid hall, 205 ft. in length internally, by 26 ft. wide, and two storeys in height. Beyond this there is an exo-narthex which runs round the whole of the outer court, but this hardly seems to be part of the original design. Altogether, the building, without this or any adjuncts which may be after-thoughts, covers about 70,000 sq. ft., or nearly the average area of a mediæval cathedral of the first class.

Externally the building (Woodcut No. 889) possesses little architectural beauty beyond what is due to its mass and the varied outline arising from the mechanical contrivances necessary to resist the thrust of its internal construction. It may be that, like the early Christian basilicas at Rome, it was purposely left plain to distinguish it from the external adornment of Heathen temples, or it may have been intended to revêt it with marble, and add the external ornament afterwards. Before we became acquainted with the ornamented exteriors of Syrian churches, the former theory would seem the more plausible, though it can hardly now be sustained; and when we consider that the second dedication only took place the year before Justinian's death, and how soon troublous times followed, we may fairly assume that what we now see is only an incomplete design. Whatever may be the case with the exterior, all the internal arrangements are complete, and perfect both from a mechanical and an artistic point of view. In such a design as this, the first requirement was to obtain four perfectly stable arches, on which the dome might rest. The great difficulty was with the two arches running transversely north and south. These are as nearly as may be 100 ft. span and 120 high to the crown, and 10 ft. on the face. Each of them has a mass of masonry behind it for an abutment, 75 ft. long by 25 ft. wide, only partially pierced by arches on the ground and gallery floor; and as the mass might have been carried to any height, it ought, if properly constructed, to have sufficed for an arch very much wider and more heavily weighted than that which it supports. Yet the southern wall is considerably bulged, and the whole of that side thrown out of the perpendicular. This probably



888. Plan of Sta. Sophia. Upper Storey and Ground Floor. Scale 100 ft. to 1 in.

was the effect of the earthquake which caused the fall of the dome in 559, since no further settlement seems to have taken place. The longitudinal arches presented no difficulty. The distance between the solid parts of the piers was 75 ft. and this was filled up with a screen wall supporting the inner side of the arch; so, unless that was crushed, the whole was perfectly stable. Pendentives between these four arches ought not to have presented any difficulties. It would, however, have been better, from an architectural point of view, if they had been carried further up and forward, so as to hang a weight inside the dome, to counteract the outward thrust, as was afterwards so successfully practised at Beejapore.[1] As it is, the dome rests rather on the outer edge of the system, without sufficient space for abutment. In itself the dome is very little lower than a hemisphere, being 107 ft. across by 46 ft. in height. Externally, it would have been better if higher; for internal effect this is sufficient. Its base is pierced by forty small windows, so small and so low as not to interfere in any way with the apparent construction, but affording an ample supply of light —in that climate at least—to render every part of the dome bright and cheerful.



889. Elevation Façade of Sta. Sophia at Constantinople. (From Salzenberg.) Scale 100 ft. to 1 in.

Beyond the great dome, east and west, are two semi-domes of a diameter equal to that of the great dome, and these are again cut into by two smaller domes, so that the building, instead of being a Greek cross, as usually asserted, is only 100 ft. across in the centre and 125 ft. wide beyond the central space each way. There is a little awkwardness in the way in which the smaller semi-domes cut into the larger, and the three windows of the latter are unconnected with any other part of the design, which is unpleasing, but might easily be remedied in a second attempt. These very irregularities, however, give a variety and appropriateness to the design which has probably never been surpassed. A single dome of the area of the central and two semi-domes, would not have appeared nearly so large, and would have overpowered everything else in the building. As it is, the eye wanders upwards from the large arcades of the ground floor to the smaller arches of the galleries, and thence to the smaller semi-domes. These lead the eye

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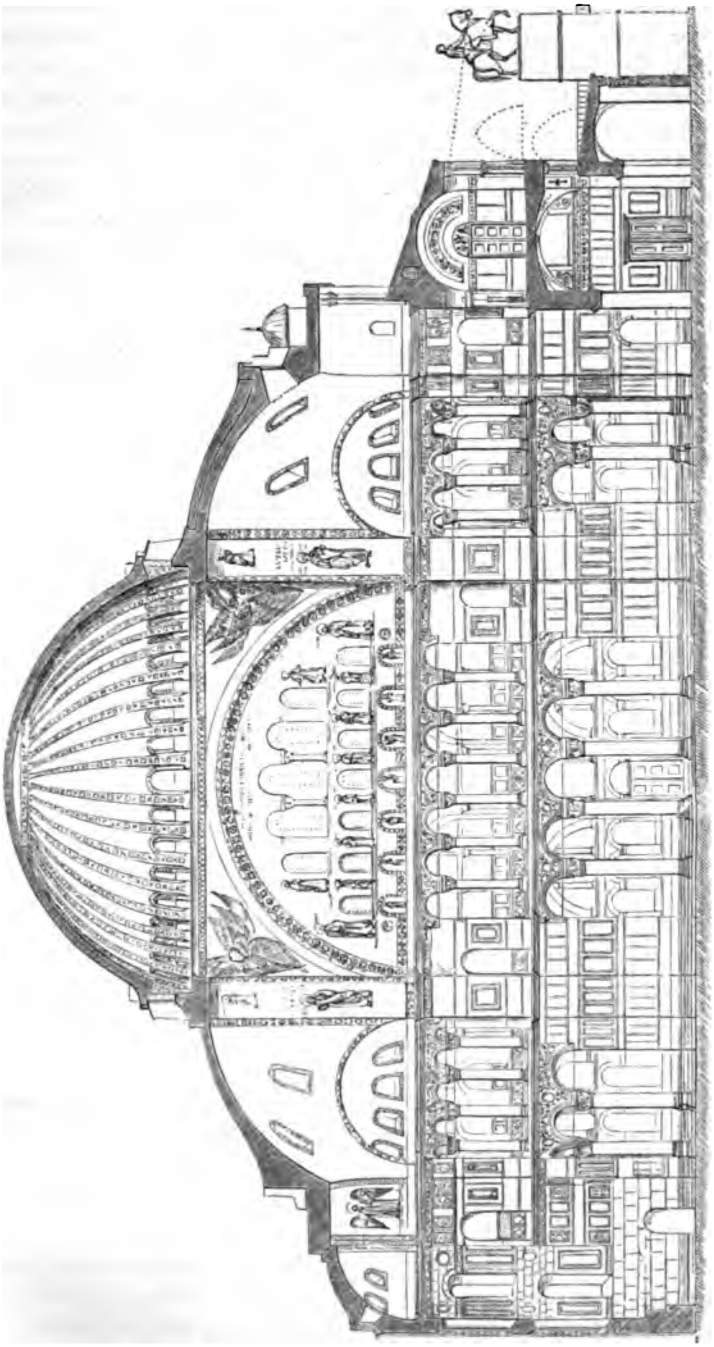
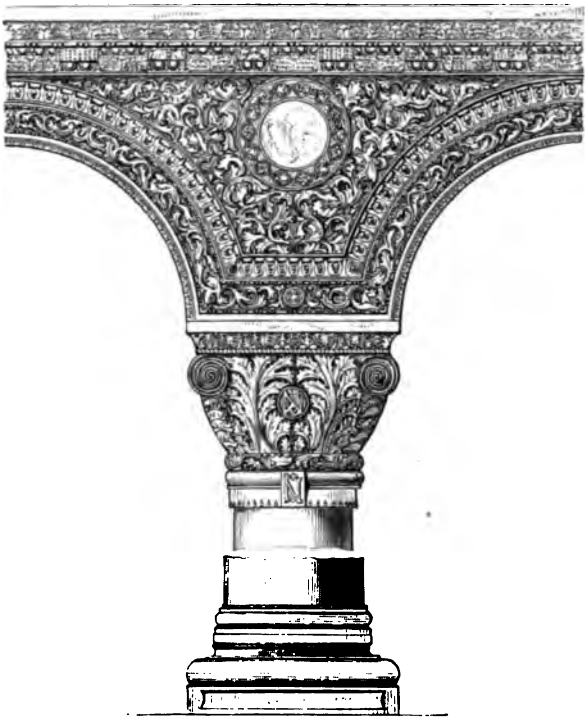
[1] See vol. iii., in chapter on Indian Saracenic Architecture.



890. Section of Sta. Sophia from E. to W. Scale 100 ft. to 1 in.

on to the larger, and the whole culminates in the great central roof. Nothing, probably, so artistic has been done on the same scale before or since. In these arrangements Sta. Sophia seems to stand alone.

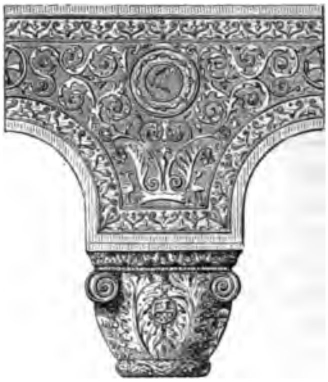
If, however, the proportions of this church are admirable, the details are equally so. All the pillars are of porphyry, verd antique, or marbles of the most precious kinds. The capitals are among the most admirable specimens of the style. It will be remembered that the governing line of a classical Corinthian capital is a hollow curve, to which acanthus-leaves or other projecting ornaments were applied.



891. Lower Order of Sta. Sophia. (From Salzenberg.)

When the columns were close together, and had only a beam to support, this form of capital was sufficient; but when employed to carry the constructive arches of the fabric its weakness became instantly apparent. Long before Justinian's time, the tendency became apparent to reverse the curve and to incise the ornament. In Sta. Sophia the transition is complete; the capitals are as full as elegance would allow, and all the surfaces are flat, with ornaments relieved by incision. In the lower tier of arches (Woodcut No. 891) this is boldly and beautifully done, the marble being left to tell its own story. In the upper tier, further removed from the eye, the interstices are filled in with black marble, so as to ensure the desired effect.

All the flat surfaces are covered with a mosaic of marble slabs of the most varied patterns and beautiful colours; the domes, roofs, and curved surfaces, with a gold-grounded mosaic relieved by figures or architectural devices. Though much of the mosaic is now concealed, enough is left to enable the effect of the whole to be judged of, and it certainly is wonderfully grand and pleasing. The one thing wanting is painted glass, like that which adorns the Dome of the Rock at Jerusalem, to render this building as solemnly impressive as it is overpoweringly beautiful.



892. Upper Order of Sta. Sophia. (From Salzenberg.)

Sta. Sophia is so essentially different from the greater number of churches, that it is extremely difficult to institute a comparison between them. With regard to external effect, Gothic cathedrals generally excel it; but whether by accident or by the inherent necessity of the style is by no means so clear. In so far as the interior is concerned, no Gothic architect ever rose to the conception of a hall 100 ft. wide, 250 ft. in length, and 180 ft. high, and none ever disposed each part more artistically to obtain the effect he desired to produce. Where the Byzantine style might profit from the experience subsequently gained by Gothic architects is in the use of mouldings. The one defect in the decoration of Sta. Sophia is that it depends too much on colour. It would have been better if the pier-arches, the window-frames, and the string-courses generally had been more strongly accentuated by moulding and panellings, but this is a slight defect among so many beauties.

A comparison with the great Renaissance cathedrals is more easy, but results even more favourably to the Byzantine example. Two of these have domes which are considerably larger—St. Peter's at Rome and Sta. Maria at Florence being each 126 ft.—St. Paul's, London (108) is within a foot of the same diameter, all the rest are smaller.[1] This, however, is of less consequence than the fact that they are all adjuncts to the design of the church. None of them are integral or supported by the rest of the design, and all tend to dwarf the buildings they are attached to, rather than to heighten the general effect. With scarcely an exception also all the Renaissance cathedrals employ internally great sprawling pillars and pilasters, designed for external use by the Romans, which not only diminish the apparent size of the building but produce an effect of unreality and sham utterly fatal to true art.

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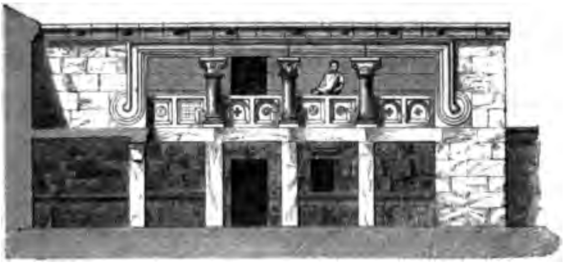
[1] The Renaissance dome which fits best to the church on which it is placed is that of Sta. Maria at Florence; but, strange to say, it is neither the one originally designed for the place, nor probably at all like it. All the others were erected as designed by the architects who built the churches, and none fit so well.

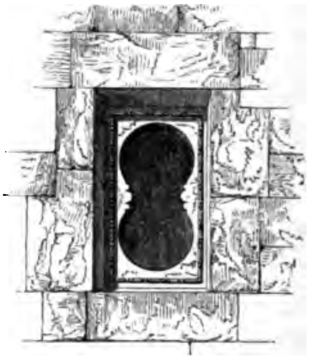
In fact, turn it as we will, and compare it as we may with any other buildings of its class, the verdict seems inevitable that Sta. Sophia—internally at least, for we may omit the consideration of the exterior, as unfinished—is the most perfect and most beautiful church which has yet been erected by any Christian people. When its furniture was complete the verdict would probably have been still more strongly in its favour; but so few of the buildings described in these pages retain these adjuncts in anything like completeness that they must be withdrawn from both sides and our remarks be confined to the architecture, and that only.

DOMESTIC ARCHITECTURE.

When the Count De Vogüé's book is complete we shall probably be in a position to realise the civil and domestic architecture of Syria in the 5th and 6th centuries with a completeness that, a very short time ago, would have been thought impossible. Owing to the fact that every part of the buildings in the Hauran was in stone, and that they were suddenly deserted on the Mahomedan conquest, never, apparently, to be reoccupied, many of the houses remain perfectly entire to the present day, and in Northern Syria only the roofs are gone.


893. Elevation of House at Rifadi. (From De Vogüé.) Scale 20 ft. to 1 in.

These buildings are so numerous and so interesting that on some future occasion it may be worth while to illustrate them more fully. At present one example must suffice to explain this class of houses. Generally they seem to have been two storeys in height, adorned with verandahs supported by stone columns, the upper having a solid screen-fence of stone about 3 ft. 6 in. high, intended apparently as much to secure privacy to the sleeping apartments of the house as protection against falling out. In some instances the lower storey is twice the height of the upper, and contained the state apartments of the house. In others, as in that at Rifadi (Woodcut No. 893), it seems to have been intended for the offices.



894. Window at Chagga. (From De Vogüé.)

In some instances one is startled to find details which we are accustomed to associate with much more modern dates; as, for instance, this window (Woodcut No. 894), from the palace at Chagga, which there seems no reason whatever for doubting, belongs to the 3rd century—anterior to time of Constantine! It looks more like the vagary of a French architect of the age of Francis I.

The sepulchral remains of Syria, both structural and rock-cut, seem nearly as numerous as the dwellings of the living, and are full of interest, not only from their frequently bearing dates, but from their presenting new types of tombs, or old types in such new forms as scarcely to be recognizable. Till, however, the illustrations are accompanied by some explanatory text it is scarcely safe to say much about them.

With our present limits it is only possible to characterize generally the main features of the Byzantine style, and to indicate the sources from which further information may be obtained. In the present instance it is satisfactory to find that ample materials now exist for filling up a framework which a few years ago was almost entirely a blank. Any one who will master the works of De Vogüé, or Texier, or Salzenberg, and other minor publications, may easily acquire a fair knowledge of the older Byzantine style of architecture. Once it is grasped it will probably be acknowledged that there are few more interesting chapters than that which explains how a perfect Christian Church like that of Sta. Sophia was elaborated out of the classical edifices of ancient Rome. It will also probably be found that there are few more instructive lessons to be learnt from the study of architectural history than the tracing of the various contrivances which were so earnestly employed, during the first two centuries of Christian supremacy, in attaining this result.

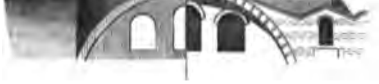
CHAPTER IV.

NEO-BYZANTINE STYLE.

CONTENTS.

Sta. Irene, Constantinople—Churches at Ancyra, Trabala, and Constantinople—Churches at Salonica and in Greece — Domestic Architecture.

SANTA SOPHIA at Constantinople was not only the grandest and most perfect creation of the old school of Byzantine art, but it was also the last. It seems as if the creative power of the Empire had exhausted itself in that great effort, and for long after it the history is a blank. We always knew that the two centuries which elapsed between the ages of Constantine and Justinian were ages of great architectural activity. We knew that hundreds, it may be thousands, of churches were erected during that period. It might have been that they had all perished, and that thus the thread of the narrative was lost. Fortunately, we have discovered that this is not the case, and we can now trace almost all the steps by which the semi-classical Dome of the Rock at Jerusalem was converted into the perfect Byzantine church at Constantinople. With the two subsequent centuries, however, the case seems widely different. Shortly after Justinian's death, the troubles of the Empire, the Persian wars of Heraclius, and, more than either, the rise of the Mahomedan power in the East, and of the Roman pontificate under Gregory the Great in the West—all tended so to disturb and depress the Byzantine kingdom as to leave little leisure and less means for the exercise of architectural magnificence. It is therefore hardly probable that we shall ever be in a position to illustrate the 7th and 8th centuries as we now know we can the 5th and 6th. Still, building must have gone on, because when we again meet the style, it is changed. One of the very earliest churches of the new school is that of Sta. Irene at Constantinople, rebuilt as we

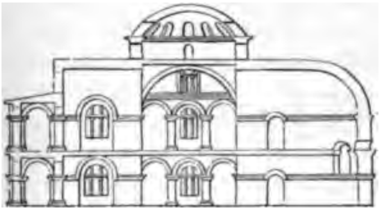


895. Half Section, half Elevation, of Dome of Sta. Irene at Constantinople.

now find it by Leo the Isaurian (A.D. 718–740). It differs in several essential particulars from the old style, and contains the germ of much that we find frequently repeated. The change is not so great as might have taken place in two centuries of building activity, but it is considerable. In this church we find, apparently for the first time in a complete form, the new mode of introducing the light to the dome through a perpendicular drum, which afterwards became so universal that it serves to fix the age of a building in the East with almost as much certainty as the presence of a pointed arch does that of a building in the West. As this invention is so important, it may be well to recapitulate the steps by which it was arrived at.

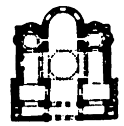
The oldest mode of lighting a dome is practised in the Pantheon (Woodcut No. 191), by simply leaving out the central portion. Artistically and mechanically nothing could be better, but before the invention of glass it was intolerably inconvenient whenever much rain or snow fell. A change therefore was necessary, and it is found in the tomb or temple of Marcellus, built during the reign of Constantine on the Via Prenestina at Rome. It consists simply of boring four circular holes through the dome a little above its springing. The next step is seen at Thessalonica in the church of St. George (Woodcut No. 878). There eight semi-circular lunettes are pierced in the dome, at its springing, and answer the purpose very perfectly. The system culminated in Sta. Sophia, where forty windows introduce a flood of light without its ever falling on the eyes of the spectator. After this it seems to have been considered desirable not to break the hemisphere of the dome, but to place the windows in a perpendicular circular rim of masonry—called the drum—and to introduce the light always through that. Externally there can be no doubt but that this was an improvement; it gave height and dignity to the dome in small churches, where, without this elevation, the feature would have been lost. Internally, however, the advantage is problematical: the separation of the dome from its pendentives destroyed the continuity of the roof, and introduced the stilted effect so objectionable in Renaissance domes. In the Neo-Byzantine churches the dome became practically a skylight on the roof, the drum increasing in height and the dome diminishing in dignity as the style progressed. As all the churches are small, the feature is unobjectionable; but in larger edifices it would have been found difficult to construct it, and the artistic result would hardly have been pleasing, even had this difficulty been got over. Be this as it may, its value as a chronometric landmark is undoubted.

As a rule it may generally be asserted that, in all Christian domes erected during the old Byzantine period; the light is introduced by openings in the dome itself. After that time, the light is as generally admitted through windows in the drum, the dome itself being cut into only in the rarest possible instances.



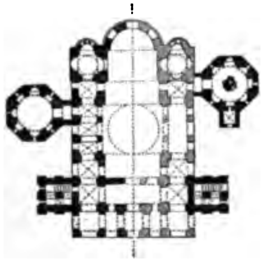
896. St. Clement, Ancyra. (From a Drawing by Ed. Falkener.)

If these views are correct, the church of St. Clement at Ancyra is a transitional specimen subsequent to Sta. Sophia, because the dome is raised timidly (Woodcut No. 896) on a low drum pierced with four small windows; but it is anterior to Sta. Irene, because the dome is still pierced with twelve larger windows, after the manner of Sta. Sophia and the older churches. All the details of its architecture, in so far as they can be made out, bear out this description. They are further removed from the classical type than the churches of Justinian, and the whole plan (Woodcut No. 897) is more that which the Greek church afterwards took than any of the early churches show. Its greatest defect—though the one most generally inherent in the style—is in its dimensions. It is only 64 ft. long, over all externally, by 58 ft. wide. Yet this is a fair average size of a Greek church of that age.



897. Church of St. Clement, Ancyra. Scale 100 ft. to 1 in.

Another church, very similar, is found at Myra, dedicated to St. Nicholas. It exceeds that of St. Clement in size, and has a double narthex considerably larger in proportion, but so ruined that it is difficult to make out its plan, or to ascertain whether it is a part of the original structure, or a subsequent addition. The cupola is raised on a drum, and altogether the church has the appearance of being much more modern than that at Ancyra.



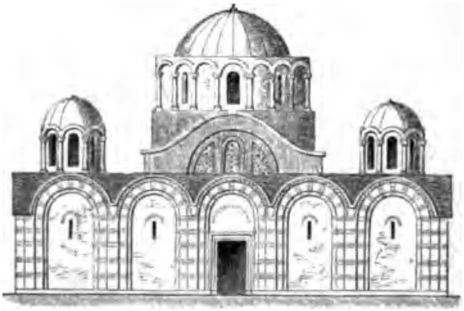
898. Church at Trabala. Scale 100 ft. to 1 in.

A third church of the same class, and better preserved, is found at Trabala in Lycia. It is of the same type as St. Clement, and similar in its arrangements to Sta. Sophia, except in the omission of the semi-domes, which seem never to have been adopted in the provinces, and indeed may be said to be peculiar to the metropolitan church. Notwithstanding the beauty of that feature, it appears to have remained dormant till revived by the Turks in Constantinople, and there alone.

In this example there are two detached octagonal buildings, either tombs or sacristies; a form which, except in large detached buildings, does not seem to have been so common as the circular, till after the time of Justinian.

Returning to the capital, we find one other remarkable peculiarity of the Neo-Byzantine style in the attempt to allow the external surface of an ordinary tunnel-vault to retain its form without any ridge whatever. It can hardly be doubted that this is artistically a mistake. With domes it was early felt to be so, and consequently we always find a flower or pinnacle in iron, or some such ornament, marking the centre. In this the Saracenic architects were especially successful—all their domes possess a central ornament sufficient to relieve them, and generally of the most beautiful proportions. With the extrados of a circular vault, however, it is even worse than with a dome. A roof is felt to be a contrivance to keep off the rain. It may be more or less sloping, according to the materials of which it is constructed; but to make one part of each ridge sloping, and the central portion flat, is a discord that offends the eye, besides looking weak and unmeaning. A pointed arch would avoid the evil, but a reverse or ogee curve is perhaps the most pleasing. In the Neo-Byzantine age, however, between the 8th and the 12th centuries, the eye seems to have got accustomed to it. It is common in the East, especially at Constantinople and at Venice. In St. Mark's and elsewhere it became so familiar a form that it was copied and continued by the Renaissance architects even to the end of the 16th century.

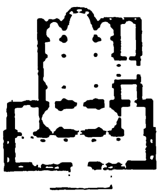
One of the best illustrations of these peculiarities is the church of Moné tés Koras at Constantinople, now converted into a mosque and called Kahira Jamissi. The older part of it seems to belong to the 11th century, the side-aisles to the 12th, and though small it illustrates the style perfectly. The porch consists of five arches covered with an intersecting vault, visible both externally and internally. The last two bays are covered with cupolas which still retain their mosaics internally, and those of singular beauty and brilliancy, though, owing to the constructive defects of the intermediate parts, the wet has leaked through, and the mosaics have mostly peeled off. Externally the front is ornamented with courses of stones of different colours, and even in its ruined state is effective and picturesque. Its principal interest is that it shows what was the matrix of the contemporary church of St. Mark at Venice. Subsequent additions have much modified the external appearance of St. Mark, but there can be very little doubt that



899. Church of Moné tés Koras. (From Lenoir.) No scale.

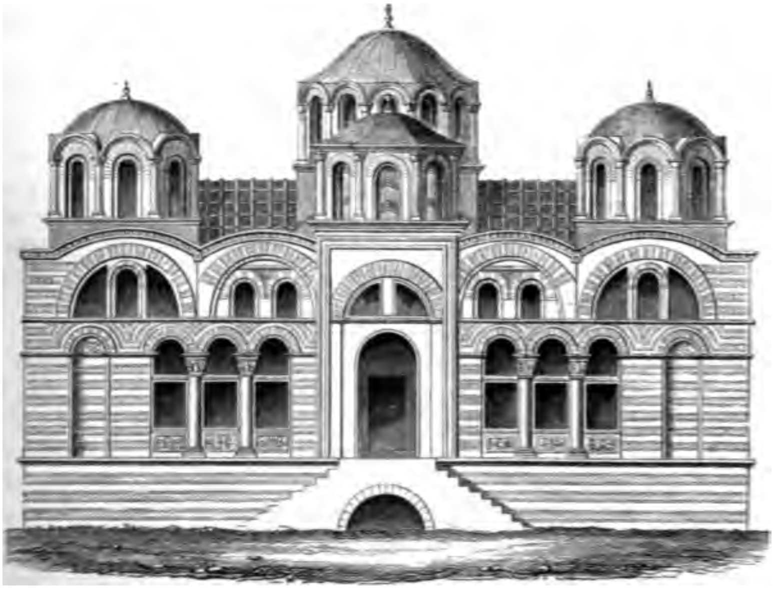
originally it was intended to be very like the façade shown in Woodcut No. 899.

Not far from Moné tés Koras there are two other churches of the same class and of about the same age. One, the Pantokrator, has been added to at various times so as to cover a large space of ground, but it consists consequently of small and ill-assorted parts. It retains, however, a good deal of its marble pavements and other features of interest. The other, known as the Fetije Jamissi, is smaller and more complete, and possesses some mosaics of considerable beauty.



900. Plan of the Theotokos. Scale 100 ft. to 1 in.

The best example of its class, however, in Constantinople is that known as the Theotokos. Like those just mentioned it is very small, the church itself being only 37 ft. by 45, and, though its double narthex and lateral adjuncts add considerably to its dimensions, it is still only a very small church. Some parts of it are as old as the 9th or 10th century, but the façade represented in Woodcut No. 901 is certainly not older than the 12th century. Taking it altogether, it is perhaps the most complete and elegant church of its class now known to exist in or near the capital, and many of its details are of great beauty and perfection.

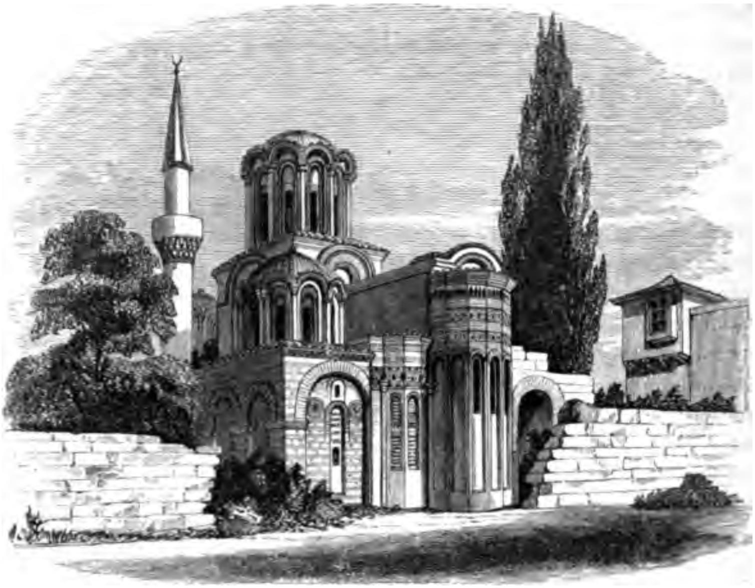


901. Elevation of Church of Theotokos. (From Lenoir, 'Architecture Monastique.') Enlarged scale.

It seems scarcely possible to suppose that the meagre half-dozen of small churches just enumerated are all that were erected in the capital between the death of Justinian and the fall of the city. Yet there is no evidence that the Turks destroyed any. Why should they? They converted them into mosques, finding them especially convenient for that purpose, and they have maintained them with singularly little alteration to the present day.

SALONICA.

This deficiency of examples in the capital is to some extent supplied by those which are found existing at Salonica. Four churches belonging to this age are illustrated in Texier and Pullan's work.



902. Apse of Church of the Apostles, Salonica. (From Texier and Pullar.)

The oldest and the largest of these is that of Sta. Sophia. It is a church of considerable dimensions, considering its age and style, measuring 140 ft. east and west by 118 over all externally, and with a central dome 33 ft. in diameter. It possesses also an upper gallery, and its arrangements generally are well considered and artistic. There does not seem to be any documentary evidence of its age, but, judging from the published details, it belongs probably to the 9th or 10th century, certainly not earlier than the first date, nor lower than the latter. Its dome still retains its mosaics.

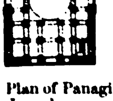
Next to this comes the church of St. Bardias, very similar in style though very much smaller, measuring only 53 ft. by 37, exclusive of the apse. Its date is perfectly ascertained—viz., 937. There is certainly not a century of difference in the age of the two last described.

Next to these comes the church of Elias, A.D. 1012, and very similar to it in style is that of the Apostles (Woodcut No. 902), which we may consequently date with safety in the 11th century, from this juxtaposition alone, though there are several other examples which enable us to treat it as a characteristic type of the age. It is a pleasing and picturesque specimen of Byzantine brickwork. Like all the churches of the time, it is small, 63 ft. by 59 externally. In plan it very much resembles the Theotokos at Constantinople, but in elevation is taller and thinner; though whether this arises from any local peculiarity, or from some difference of age, is not clear. I suspect the former. The earthquakes of the capital may have induced a less ambitious form, as far as height is concerned, than was adopted in the provinces.

GREECE.

There can be little doubt but that, if a systematic search were made among the churches of Greece, many would be brought to light which would be most useful in completing our knowledge of the Neo-Byzantine style. At Mount Athos alone, and its immediate neighbourhood, there are probably a hundred convents, many of old date, whose churches, even though rebuilt in modern times, must contain fragments of the older style; but they have not yet been examined by any competent architect. For Greece proper we are dependent almost wholly on Cauchaud[1] and Blouet.[2] They unfortunately suffice to prove that there are no churches of any dimensions sufficient to ensure dignity, nor are any so beautiful in outline or detail as to make us regret much that we do not know more about them. Still they are sufficiently original to be worthy of study, and when properly known may help to join together some of the scattered links of the chain which once connected the architecture of the West and East, but which is at present so difficult to follow out.

In Athens there are several churches of considerable interest, and not without architectural pretension. They are all small, however. The largest is that known as Panagia Lycodemo, or the church of St. Nicodemus, and is only 62 ft. long by 45 ft. wide over all. It seems also to be the oldest, since its dome is partially pierced with windows inside, though outside there is a distinctly marked drum (Woodcut No. 904). Notwithstanding the smallness of its dimensions, considerable effect is obtained internally by the judicious arrangement of the parts and


903. Plan of Panagia Lycodemo.
Scale 100 ft. to 1 in.

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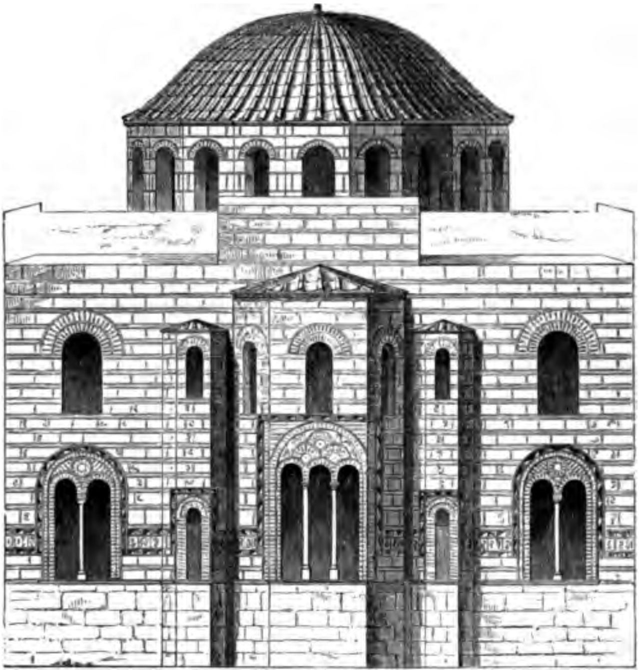
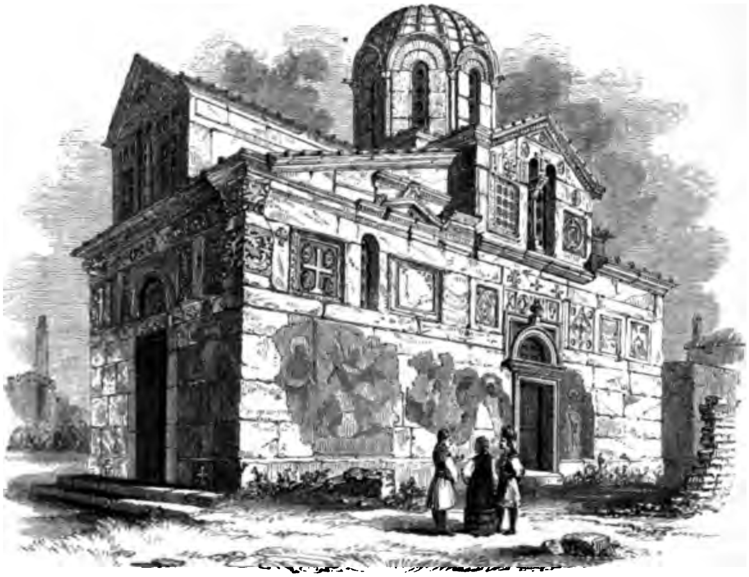
[1] 'Églises Byzantines en Grèce.'

[2] 'Expédition Scientifique de la Morée.'



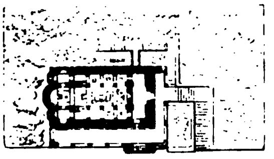
904. Church of Panagia Lycodemo. (From A. Lenoir.) Enlarged scale.



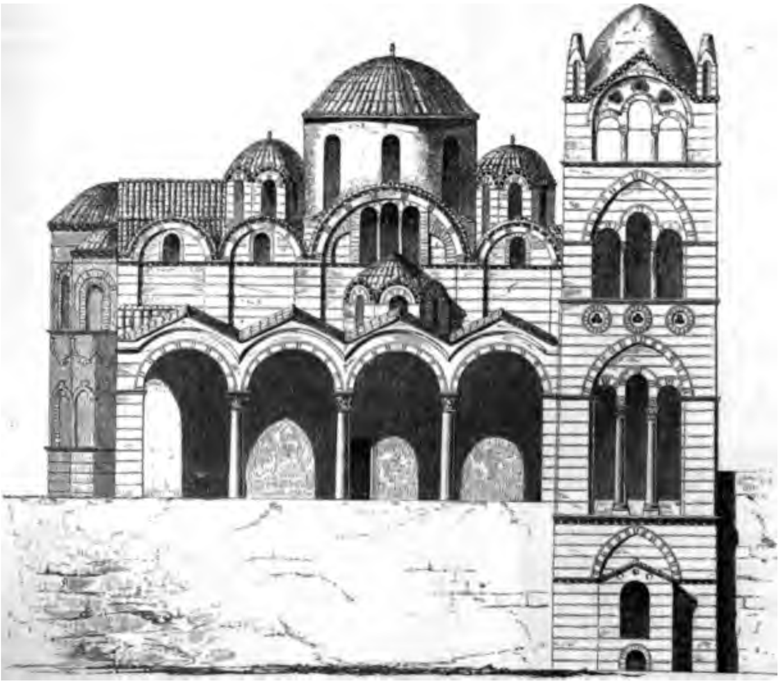
905. Cathedral at Athens (From Gailhabaud.)

the harmony of proportion which reigns throughout. The exterior is also pleasing, though the absence of a cornice gives an unfinished look to the whole, and there is a want of sufficient connexion between the dome and the walls of the building to make them part of one composition.

A more beautiful and more interesting example is the church known as the Catholicon or Cathedral at Athens (Woodcut No. 905). It is a cathedral, however, only in a Greek sense, certainly not as understood in the Latin Church, for its dimensions are only 40 ft. by 25 over all externally. It is almost impossible to judge of its age from its details, since they are partly borrowed from older classical buildings, or imitations of classical forms, so fashioned as to harmonize with parts which are old. But the tallness of its dome, the form of its windows, and the internal arrangements, all point to a very modern date for its erection—as probably the 13th century as the 11th or 12th.



906. Plan of Church at Misitra. Scale 100 ft. to 1 in.



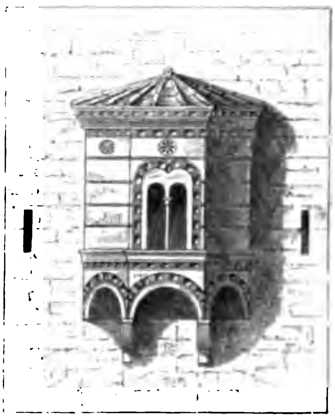
907. Church at Misitra. (From Cauchaud, 'Églises Byzantines en Grèce.') Enlarged scale.

The church of the Virgin at Misitra in the Peloponnesus—the ancient Sparta—may be of about the same age as the Catholicon at

Athens, but differs considerably in style, and bears much more resemblance to the churches of Apulia and Sicily than either of those described above.

Where arcades are used externally in these Greek churches, they are generally supported by pillars of somewhat classical look, crowned by capitals of the square foliaged form, used to support arches in the early styles all over Europe; and the windows, when divided, take merely the form of diminutive arcades. The Byzantines never attained to tracery; all their early windows are single round-headed openings. These were afterwards grouped together in threes and fives; and, as in the Gothic style, when they could be put under one discharging arch, the piers were attenuated till they became almost mullions, but always supporting constructive arches, without any tendency to run into interlacing forms like the Gothic. The universal employment of mural painting in Byzantine churches, and the consequent exclusion of painted glass, rendered the use of the large windows which the Gothic architects employed quite inadmissible; and in such a climate very much smaller openings sufficed to admit all the light that was required. Tracery would thus, in fact, have been an absurdity. The Byzantinè architects sought to ornament their windows externally by the employment of tiles or colours disposed in various patterns, and often produced a very pleasing effect, as may be seen from the woodcut (No. 904) illustrating the apse of the Panagia Lycodemo at Athens, and other specimens quoted above.

Occasionally we find in these churches projecting porches or balconies, and machicolations, which give great relief to the general flatness of the walls. These features are all marked with that elegance peculiar to the East, and more especially to a people claiming descent from the ancient Greeks, and possibly having some of their blood in their veins. Sometimes, too, even a subordinate apse is supported on a bracket-like balcony, so as to form a very pleasing object, as in the accompanying specimen from Misitra.



908. Apse from Misitra. (From Cauchaud.)

On the whole the Neo-Byzantine style may be said to be characterised by considerable elegance, with occasional combinations of a superior order; but after the time of Justinian the country was too deficient in unity or science to attempt anything great or good, and too poor to aspire to grandeur, so that it has no claim to rank among the great styles of the earth. The old Byzantine style was elevated to a first-class position through the buildings of Justinian; but from his time the history of the art is a history of decline, like that of the Eastern Empire itself and of Greece, down to the final extinction both of the Empire and the style, under the successive conquests by the Venetians and the Turks. The only special claim which the Neo-Byzantine style makes upon our sympathies or attention is that of being the direct descendant of Greek and Roman art. As such, it forms a connecting link between the past and present which must not be overlooked, while in itself it has sufficient merit to reward the student who shall apply himself to its elucidation.

DOMESTIC ARCHITECTURE.

It is more than probable that very considerable remains of the civil or domestic architecture of the Neo-Byzantine period may still be recovered. Most of their palaces or public buildings have continued to be occupied by their successors, but the habits of Turkish life are singularly opposed to the prying of the archæologist. Almost the only building which has been brought to light and illustrated is the palace of the Hebdomon at Blachernæ in Constantinople. All that remains of it, however, is a block of buildings 80 ft. by 40 in plan, forming one end of a courtyard; those at the other end, which were more extensive, being too much ruined to be restored. The parts that remain probably belong to the 9th century, and consist of two halls, one over the other, the lower supported by pillars carrying vaults, the upper free. The façade towards the court is of considerable elegance, being adorned by a mosaic of bricks of various colours disposed in graceful patterns, and forming an architectural decoration which, if not of the highest class, is very appropriate for domestic architecture.

One great cause of the deficiency of examples may be the combustibility of the capital. They may have been destroyed in the various fires, and outside Constantinople the number of large cities and their wealth and importance was gradually decreasing till the capital itself sunk into the power of the Turks in the year 1453.

CHAPTER V.

ARMENIA.

CONTENTS.

Churches at Dighour, Usunlar, Pitzounda, Bodochwinta, Mokwi, Etchmiasdin, and Kouthais — Churches at Ani and Samthawis — Details.

CHRONOLOGY.

	DATES.		DATES.
Tiridates converted to Christianity by Gregory II.	A.D. 276	Establishment of Bagratide dynasty under Ashdod	859
St. Gregory confirmed as Pontiff by Pope Sylvester	319	Greatest prosperity under Apas	923
Christianity proscribed and persecuted by the Persians	428–632	Ashdod III.	951
Fall of Sassanidæ dynasty	632	Sempad II.	977–989
		Alp Arslan takes Ani	1064
		Gajih, last of the dynasty, slain	1079
		Gengis Khan	1222

The architectural province of Armenia forms an almost exact pendant to that of Greece in the history of Byzantine architecture. Both were early converted to Christianity, and Greece remained Christian without any interruption from that time to this. Yet all her earlier churches have perished, we hardly know why, and left us nothing but an essentially Mediæval style. Nearly the same thing happened in Armenia, but there the loss is only too easily accounted for. The Persian persecution in the 5th and 6th centuries must have been severe and lasting, and the great *bouleversement* of the Mahomedan irruption in the 7th century would easily account for the disappearance of all the earlier monuments. When, in more tranquil times—in the 8th and 9th centuries—the Christians were permitted to rebuild their churches, we find them all of the same small type as those of Greece, with tall domes, painted with frescoes internally, and depending for external effect far more on minute elaboration of details than on any grandeur of design or proportion.

Although the troubles and persecutions from the 5th to the 8th century may have caused the destruction of the greater part of the monuments, it by no means follows that all have perished. On the contrary, we know of the church above alluded to (p. 428) as still existing at Nisibin and belonging to the 4th century,[1] and there can be little doubt that many others exist in various corners of the land: but they have hardly yet been looked for, at least not by anyone competent to discriminate between what was really old and what may have belonged to some subsequent rebuilding or repair.

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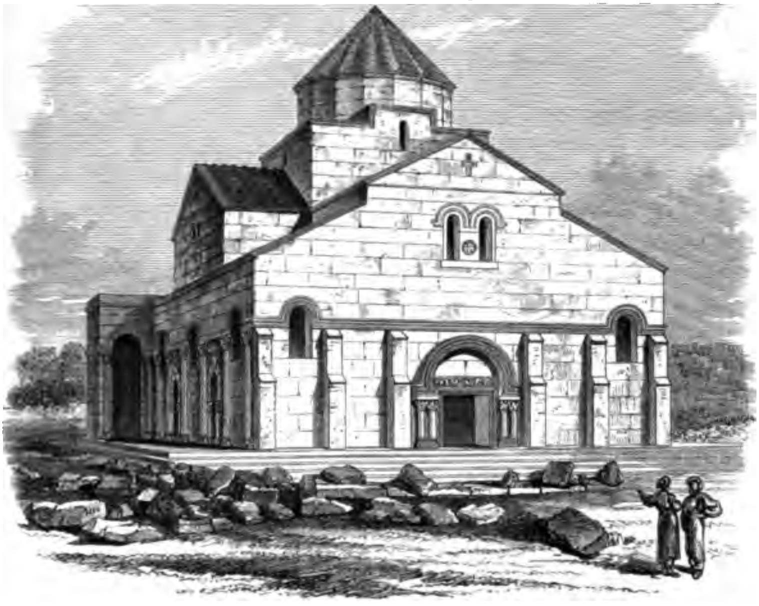
[1] Drawings of this church were made by Mr. Boutcher when travelling for the Assyrian Exploration Fund; but, he has hitherto declined to allow their publication.

Till this more careful examination of the province shall have been accomplished, our history of the style cannot be carried back beyond the Hejira. Even then very great difficulty exists in arranging the materials, and in assigning correct dates to the various examples. In the works of Texier,[1] Dubois,[2] Brosset,[3] and Grimm[4] some forty or fifty churches are described and figured in more or less detail, but in most cases the dates assigned to them are derived from written testimony only, the authors not having sufficient knowledge of the style to be



909. View of Church at Dighour. (From Texier.)

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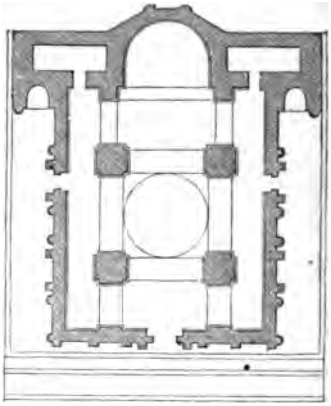
[1] C. Texier, 'Arménie et la Perse.' 2 vols. folio. Paris.

[2] Dubois de Montpereux, 'Voyage autour du Caucase.' 6 vols. 8vo. Paris, 1839, 1841.

[3] Brosset, 'Voyage Archéologique dans la Georgie et l'Arménie.' St. Petersbourg, 1849.

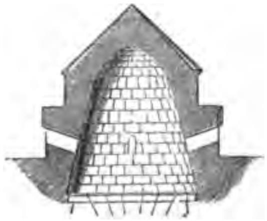
[4] D. Grimm, 'Monuments d'Architecture en Georgie et Arménie.' St. Petersbourg, 1864.

able to check the very fallacious evidence of the *litera scripta*. In consequence of this, the dates usually given are those of the building of the first church on the spot, whereas, in a country so troubled by persecution as Armenia, the original church may have been rebuilt several times, and what we now see is often very modern indeed.



910. Plan of Church at Dighour. (From Texier.) Scale 50 feet to 1 in.

Among the churches now existing in Armenia, the oldest seems to be that in the village of Dighour near Ani. There are neither traditions nor inscriptions to assist in fixing its date; but, from the simplicity of its form and its quasi-classical details, it is evidently older than any other known examples, and with the aid of the information conveyed in De Vogüé's recent publications we can have little hesitation in assigning it to the 7th century.[1] The church is not large, being only 95 ft. long by 82 wide over all. Internally its design is characterised by extreme solidity and simplicity, and all the details are singularly classical in outline. The dome is an ellipse, timidly constructed, with far more than the requisite amount of abutment. One of its most marked peculiarities is the existence of two apses externally, which form the transepts, and were no doubt intended to receive altars. Its flanks are ornamented by three quarter columns of debased classical design. These support an architrave which is bent over the heads of the windows as in the churches of Northern Syria erected during the 6th century.



911. Section of Dome at Dighour.

Its western and lateral doorways are ornamented by horse-shoe arches, which are worth remarking here, as it is a feature which the Saracenic architects used so currently and employed for almost every class of opening. The oldest example of this form known is that of the vault of the building called Takht-i-Ghero on Mount Zagros.[2] In this little shrine all the other details are so purely and essentially classic that the building must be dated before or about the time of Constantine. The horse-shoe again occurs in the church at Dana on the Euphrates in 540.[1] At Dighour we find it used, not in construction but as an ornamental feature. The stilting of the arch was evidently one of those experiments which the architects of that time were making in order to free themselves from the trammels of the Roman semi-circular arch. The Saracens carried it much further and used it with marked success, but this is probably the last occasion in which it was employed by a Christian architect as a decorative expedient.

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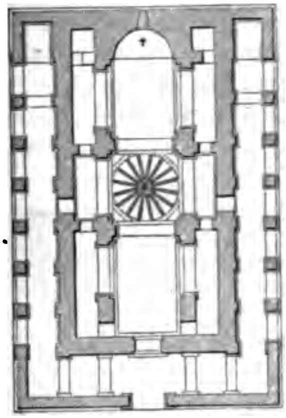
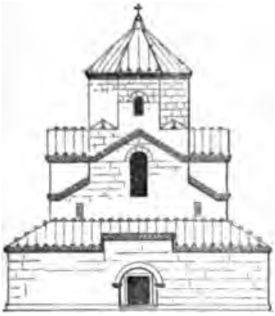
[1] Texier gives three dates to this church. In the 'Byzantine Architecture,' p. 174, it is said to be of the 7th, and at p. 4, of the 9th century. In the 'L'Arménie et la Perse,' at p. 120, the date is given as 1243. My conviction is that the first is correct.

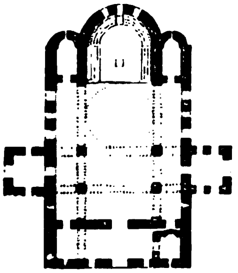
[2] Flandin and Coste, 'Voyage en Perse,' pls. 214, 215.



912. Plan of Church at Usunlar. (From Grimm.) Scale 50 ft. to 1 in.



913. West Elevation of Church at Usunlar. (From Grimm.) Scale 50 ft. to 1 in.



914. Plan of Church at Pitzounda. Scale 100 ft. to 1 in.

The six buttresses, with their offsets, which adorn the façade, are another curious feature in the archæology of this church. If they are integral parts of the original design, which there seems no reason to doubt, they anticipate by several centuries the appearance of this form in Western Europe.

One of the oldest and least altered of the Armenian churches seems to be that of Usunlar, said to have been erected by the Catholicos Jean IV. between the years 718 and 726. In plan it looks like a peristylar temple, but the verandahs which surround it are only low arcades, and have very little affinity with classical forms. These are carried round the front, but there pierced only by the doorway. The elevation, as here exhibited, is simple, but sufficiently expresses the internal arrangements, and, with an octagonal dome, forms, when seen in perspective, a pleasing object from every point of view. Both plan and design are, however, exceptional in the province. A far more usual arrangement is that found at Pitzounda in Abkassia, which may be considered as the typical form of an Armenian church. It is said to have been erected by the Emperor Justinian, and there is nothing in the style or ornamentation of the lower part that seems to gainsay its being his. But the plan is so like many that belong to a much later age, that we must hesitate before we can feel sure that it has not been rebuilt at some more modern date. Its cupola certainly belongs to a period long after the erection of Sta. Irene at Constantinople (Woodcut No. 895), when the dome pierced with tall windows had become the fashionable form of dome in the Byzantine school. Its interior, also, is unusually tall, and the pointed arches under the dome look like integral parts of the design, and when so employed belong certainly to a much more modern date. On the whole therefore it seems that this church, as we now see it, may have been rebuilt in the 9th or 10th century.

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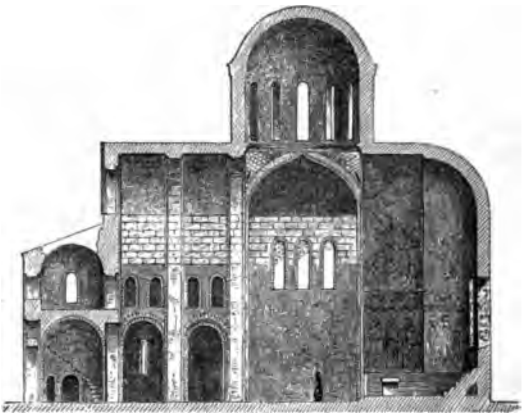
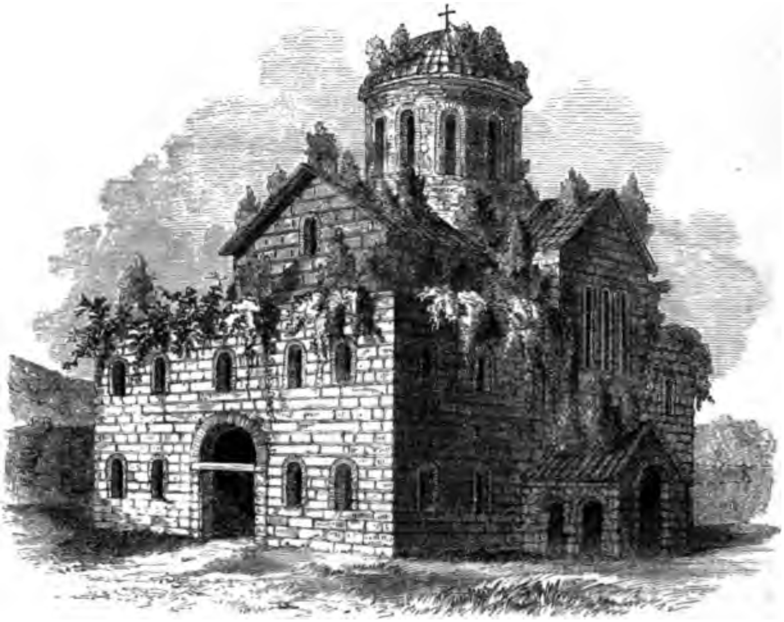
[1] Texier and Pullan, 'Byzantine Architecture,' pp. lix. lx.



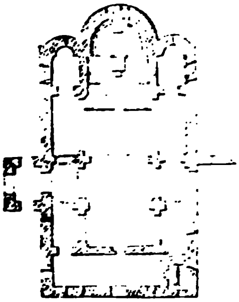
915. Section of Church at Pitzounda. (From Dubois.) No scale.



916. View of Church at Pitzounda. (From Dubois.)

Whatever its date, it is a pleasing example of the style. Externally it is devoid of ornament except what is obtained by the insertion of tiles between the courses of the stone, and a similar relief to the windows: but even this little introduction of colour gives it a gay and cheerful appearance, more than could easily be obtained by mouldings or carving in stone.

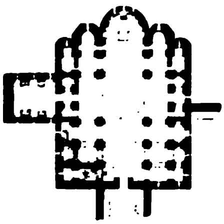
The upper galleries of the nave and the chapels of the choir are also well expressed in the external design, and altogether, for a small church—which it is (only 137 ft. by 75)—it is as pleasing a composition as could easily be found.



917. Church at Bedochwinta. (From Brosset.) Scale 100 ft. to 1 in.

The idea that the date of this church is considerably more modern than Dubois and others are inclined to assign to it, is confirmed by a comparison of its plan with that at Bedochwinta, which Brosset determines from inscriptions to belong to the date 1556–1575; and the knowledge lately acquired tends strongly to the conviction that this plan of church belongs to a later period in the Middle Ages, though it is difficult to determine when it was introduced, and it may be only a continuation of a much earlier form.

One other church of this part of the world seems to claim especial mention, that of Mokwi, built in the 10th century, and painted, as we learn from inscriptions, between 1080 and 1125. It is a large and handsome church, but its principal interest lies in the fact that in dimensions and arrangement it is almost identical with the contemporaneous church of Sta. Sophia at Novogorod, showing a connection between the two countries which will be more particularly pointed out hereafter. It is now very much ruined, and covered with a veil of creepers which prevents its outward form from being easily distinguished.



918. Plan of Church at Mokwi. Scale 100 ft. to 1 in.[1]

As will be perceived, its plan is only an extension of the two last mentioned, having five aisles instead of three; but it is smaller in scale and more timid in execution. The church which it most resembles is that at Trabala in Syria (Woodcut No. 898), which is certainly of an earlier date than any we are acquainted with further east. Practically the same plan occurs at Athens (Woodcut No. 903), and at Misitra (Woodcut No. 906), but these seem on a smaller scale than at Mokwi, so that it may be considered as the typical form of a Neo-Byzantine church for four or five centuries, and it would consequently be unsafe to attempt to fix a date from its peculiarities.

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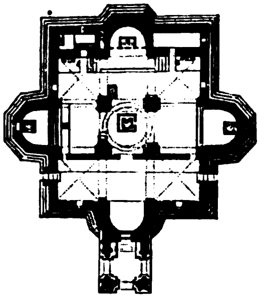
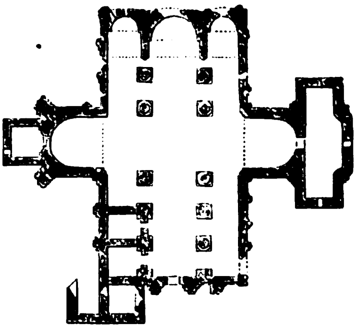
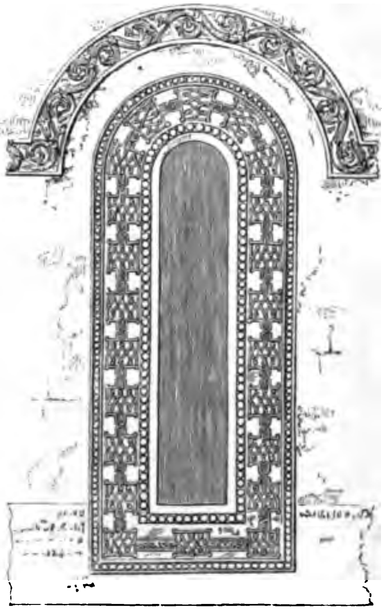
[1] I am a little doubtful regarding the scales of these two buildings. They are correctly reduced from M. Brosset's plates. But are these to be depended upon?

Interesting as these may be in an historical point of view, the most important ecclesiastical establishment in this part of the world is that of Etchmiasdin. Here are four churches built on the spots from which, according to tradition, rose the two arches or rainbows, crossing one another at right angles, on which our Saviour is said to have sat when he appeared to St. Gregory. They consequently ought to be at the four angles of a square, or rectangle of some sort, but this is far from being the case. The principal of these churches is that whose plan is represented in Woodcut No. 919. It stands in the centre of a large square, surrounded by ecclesiastical buildings, and is on the whole rather an imposing edifice. Its porch is modern; so also, comparatively speaking, is its dome; but the plan, if not the greater part of the substructure, is ancient, and exhibits the plainness and simplicity characteristic of its age. The other three churches lay claim to as remote a date of foundation as this, but all have been so altered in modern times that they have now no title to antiquity.

The idea that the churches at Pitzounda and Bedochwinta must be comparatively modern is confirmed by comparing their plan with that of Kouthais, a church which there seems no reasonable ground for doubting

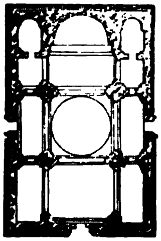

919. Plan of Church at Etchmiasdin. (From Brosset.) Scale 100 ft. tol in.


920. Church of Kouthais. (From Dubois.) Scale 100 ft. to 1 in.

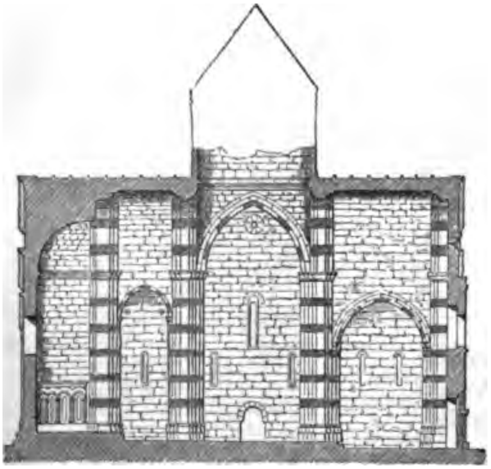

921. Window at Kouthais. (From Doubois.)

was founded in 1007, and erected, pretty much as we now find it, in the early part of the 11th century. It has neither coupled piers nor pointed arches, but is adorned externally with reed-like pilasters and elaborate frets, such as were certainly employed at Ani in the course of the 11th century. The annexed elevation (Woodcut No. 921) of one of its windows, exhibits the Armenian style of decoration of this age, but is such as certainly was not employed before this time, though, with various modifications, it became typical of the style at its period of greatest development.

Ani.



922. Plan of Cathedral at Ani. (From Texier.) Scale 100 ft. to 1 in.

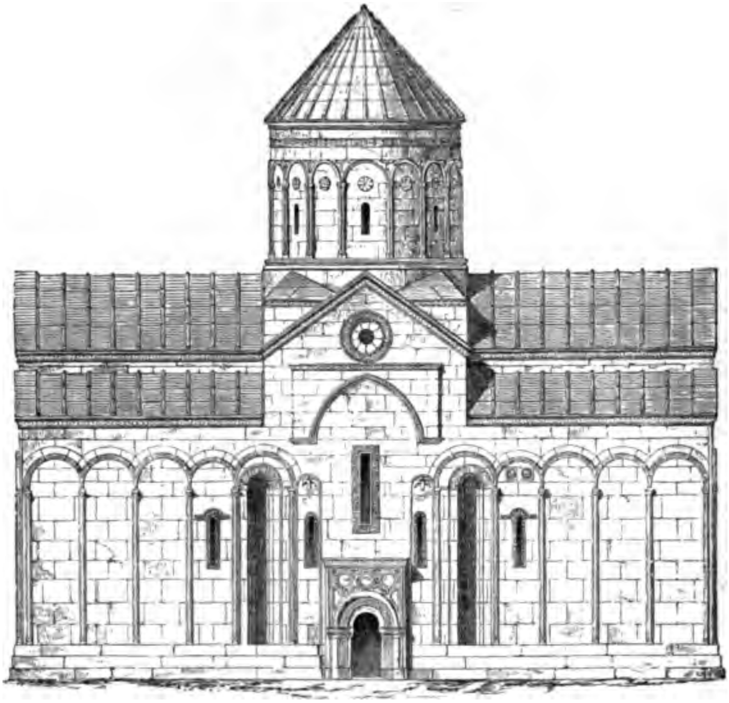


923. Section of Cathedral at Ani. Scale 50 ft. to 1 in.

Even Etchmiasdin, however, sinks into insignificance, in an architectural point of view, when compared with Ani, which was the capital of Armenia during its period of greatest unity and elevation, and was adorned by the Bagratide dynasty with a series of buildings which still strike the traveller with admiration, at least for the beauty of their details; for, like all churches in this part of the world, they are very small. If, however, the cathedral at Ani is interesting to the architect from its style, it is still more so to the archæologist from its date, since there seems no reason to doubt that it was built in the year 1010, as recorded in an inscription on its walls. This, perhaps, might be put on one side as a mistake, if it were not that there are two beautiful inscriptions on the façade, one of which is dated 1049, the other 1059. To this we must add our knowledge that the city was sacked by Alp Arslan in 1064, and that the dynasty which alone could erect such a monument was extinguished in 1080. With all this evidence, it is startling to find a church not only with pointed arches but with coupled piers and all the characteristics of a complete pointed-arched style, such as might be found in Italy or

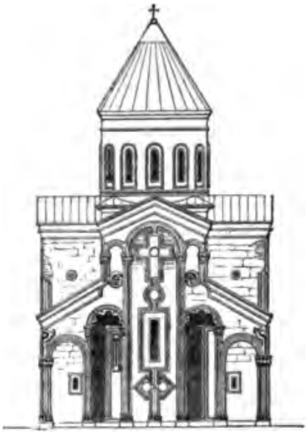
Sicily not earlier than the 13th century. This peculiarity is, however, confined to the constructive parts of the interior. The plan is that of Pitzounda or Bedochwinta, modified only by the superior constructive arrangement which the pointed arch enabled the architects to introduce; and externally the only pointed arch anywhere to be detected is in the transept, where the arch of the vault is simulated to pass through to the exterior.

In the plan and elevation of the building will be observed a peculiarity which was afterwards almost universal in the style. It is the angular recess which marks the form of the apses outside without breaking the main lines of the building. In the lateral elevation of this cathedral (Woodcut No. 924) they are introduced on each side of the portal where the construction did not require them, in order to match those at the east end. But in the Cathedral at Samthawis (Woodcut No. 925) they are seen in their proper places on each side of the central apse. Though this church was erected between the years 1050–1079, we find these niches adorned with a foliation (Woodcut No. 926) very like what we are accustomed to consider the invention of the 14th century in Europe, though even more elegant than anything of its class used by the Gothic architects.

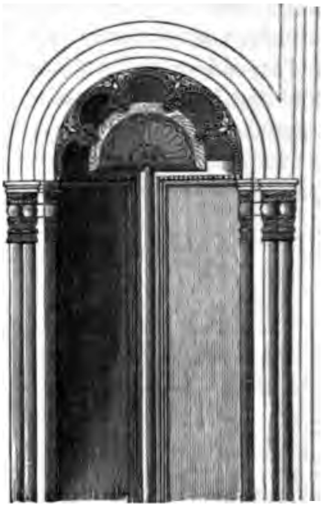


924. Side Elevation of Cathedral at Ani. Enlarged scale.

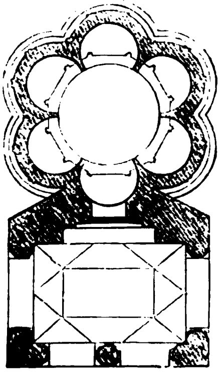
At Sandjerli, not far from Ani, is another church, which, from inscriptions translated by M. Brosset, and from sections given by him, appears to belong to the same date (1033-1044), and to possess coupled columns and pointed arches like those of the cathedral of Ani, which indeed it resembles in many points, and which renders the date above given highly probable.



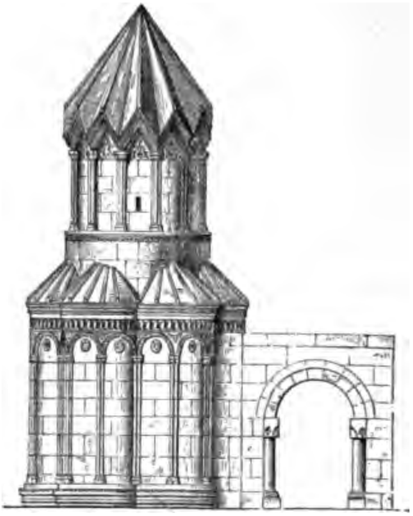
925. East Elevation of Chapel at Samthawis. (From Grimm.)



926. Niche at Samthawis. (From Grimm.)

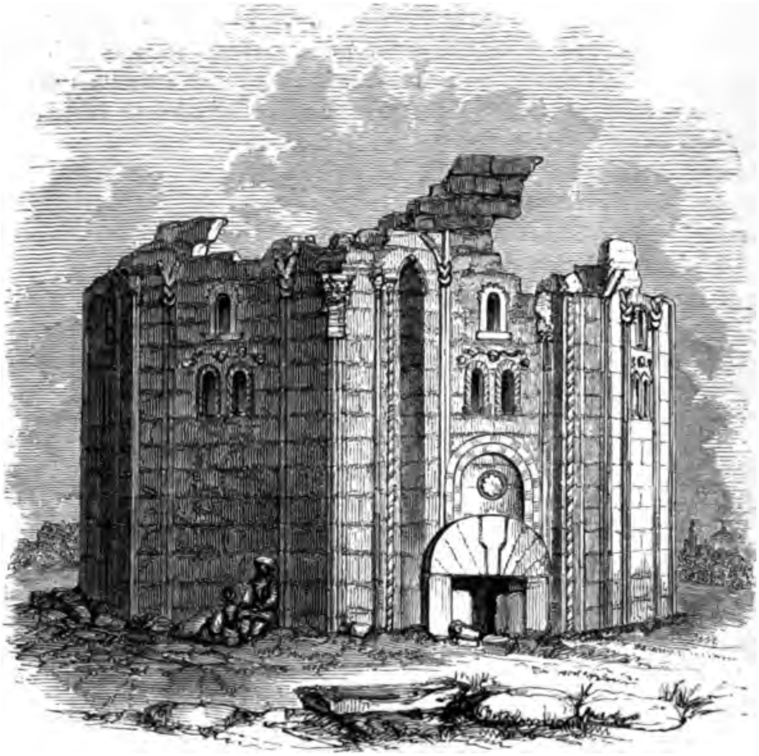


927. Plan of Tomb at Ani. (From Texier.)



928. Tomb at Ani. (From Texier.)

The plans above quoted may probably be taken as those most typical of the style, but in no part of the world are the arrangements of churches so various. All being small, there were no constructive difficulties to be encountered, and as no congregation was to be accommodated, the architects apparently considered themselves at liberty to follow their fancies in any manner that occurred to them. The consequence is that the plans of Armenian churches defy classification; some are square, or rectangles of every conceivable proportion of length to breadth, some octagons or hexagons, and some of the most indescribable irregularity. Frequently two, three, or four are grouped and joined together. In some instances the sacred number of seven are coupled together in one design, though more generally each little church is an independent erection; but they are all so small that their plans are of comparatively little importance. No grandeur of effect or poetry of perspective can be obtained without considerable dimensions, and these are not to be found in Armenia.

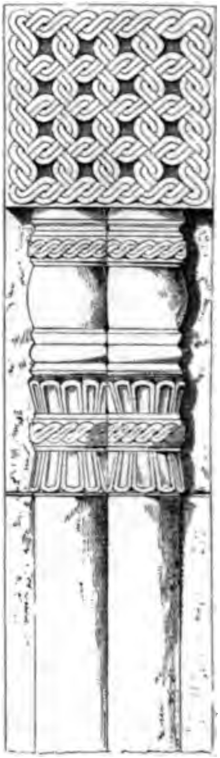


929. Tomb at Varzahan. (From Layard's 'Nineveh and Babylon.')

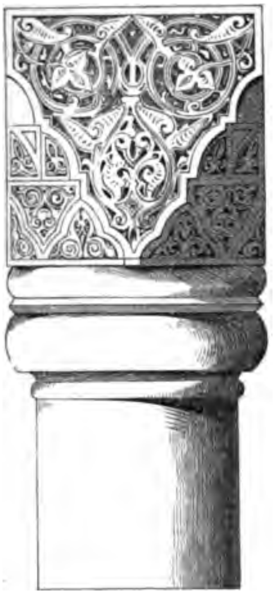
There are also some examples of circular churches, but these are far from being numerous. Generally speaking they are tombs, or connected with sepulchral rites, and are indeed mere amplifications of the usual tombs of the natives of the country, which are generally little models of the domes of Armenian churches placed on the ground, though perhaps it would be more correct to say that the domes were copied from the tombs than the reverse.

The most elegant of all those hitherto made known is one found at Ani, illustrated in Woodcuts Nos. 927, 928. Notwithstanding the smallness of its dimensions, it is one of the most elegant sepulchral chapels known.

Another on a larger scale (Woodcut No. 929) is borrowed from Mr. Layard's book. This tomb shows all the peculiarities of the Armenian style of the 11th or 12th century. Though so much larger, it is by no means so beautiful as the last mentioned tomb at Ani. In its ornamentation a further refinement is introduced, inasmuch as the reed-like columns are tied together by true love-knots instead of capitals—a freak not uncommon either in Europe at the same age, or in the East at the present day, but by no means to be recommended as an architectural expedient.



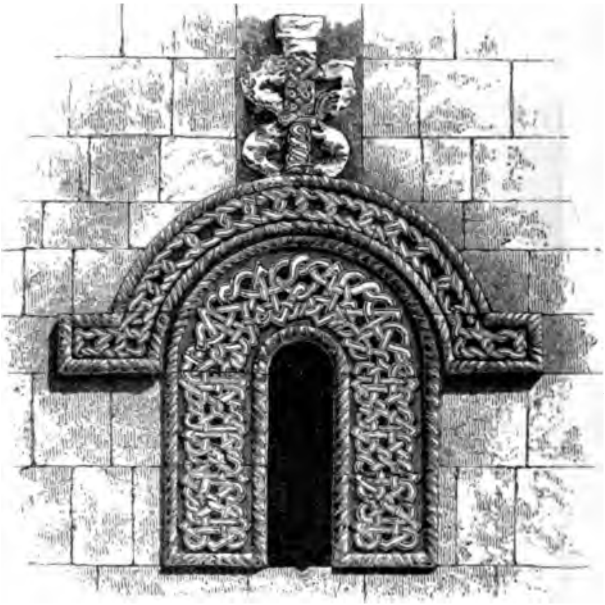
931. Capital at Gelathi. (From Grimm.)



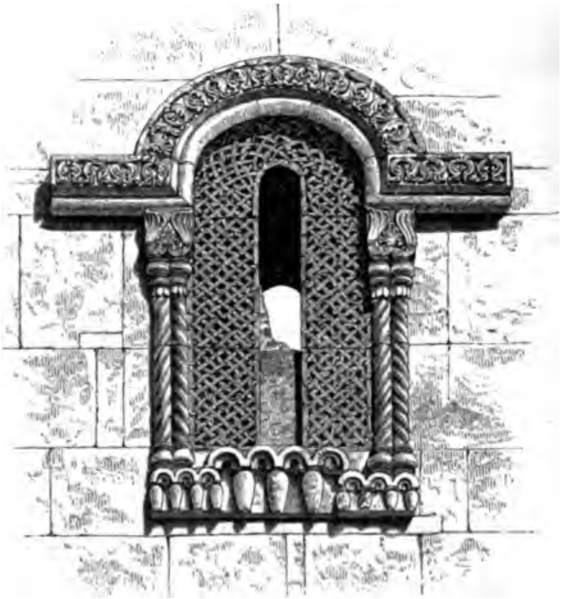
930. Capital at Ani. (From Grimm.)

With scarcely an exception, all the buildings in the Armenian provinces are so small that they would hardly deserve a place in a history of architecture were it not for the ingenuity of their plans and the elegance of their details. The beauty of the latter is so remarkable that, in order to convey a correct notion of the style, it would be necessary to illustrate them to an extent incompatible with the scope of this work. In them too will be found much that has hitherto been ascribed to other sources. The annexed capital (Woodcut No. 930), for instance, would generally be put down as Saracenic of the best age, but it belongs, with a great deal more quite as elegant, to one of the churches at Ani; and the capital from Gelathi (Woodcut No. 931) would not excite attention if found in Ireland. The interlacing scrolls which occupy its head are one of the most usual as well as one of the most elegant modes of decoration employed in the province, and are applied with a variety and complexity nowhere else found in stone, though they may be equalled in some works illustrated by the pen.

Besides, however, its beauty in an artistic point of view, this basket pattern, as it is sometimes called, is still more so as an Ethnographic indication which, when properly investigated, may lead to the most important conclusions. The three following woodcuts, Nos. 932, 933, and 934, taken from churches at a now deserted village called Ish Khan, will serve to explain its more usual forms; but it occurs almost everywhere in the Armenian architectural province, and with as infinite a variety of details as are to be found with its employment in Irish manuscripts.

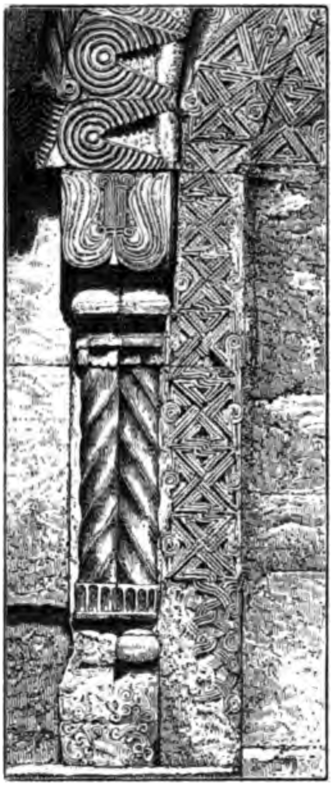


932. Window in small Church at Ish Khan, Tortoom. (From a Photograph.)



933. Window in Ish Khan Church Tortoom. (From a Photograph.)

Out of Armenia it occurs in the church at Kurtea el Argyisch in Wallachia (Woodcut No. 951), and is found in Hungary and Styria, and no antiquary will probably fail to recognise it as the most usual and beautiful pattern on Irish crosses and Scotch sculptured stones. On the other hand it occurs frequently in the monolithic deepdans or lamp-posts and in the temples on the Canarese or West Coast of India, and in all these instances with so little change of form that it is almost impossible that these examples should be independent inventions. Still the gaps in the sequence are so great that it is very difficult to see how they could emanate from one centre. Few, however, who know anything of the early architecture of Ireland can fancy that it did come from Rome across Great Britain, but that it must have had its origin further east, among some people using groups of churches and small cells, instead of congregational basilicas. So far, too, as we can yet see, it is to the East we must look for the original design of the mysterious round towers which form so characteristic a feature of Irish architecture, and were afterwards so conspicuous as minars in the East, and nowhere more so than in Armenia. Recent researches, too, are making it more and more clear that Nestorian churches did exist all down the West Coast of India from a very early period, so that it would not be impossible that from Persia and Armenia they introduced the favourite style of ornament.


934. Jamb of Doorway at Ish Khan Church, Armenia. (From a Photograph.)

All this may seem idle speculation, and it may turn out that the similarities are accidental, but at present it certainly does not look as if they were, and if they do emanate from a common centre, tracing them back to their original may lead to such curious ethnological and historical conclusions that it is at all events worth while pointing them out in order that others may pursue the investigation to its legitimate conclusion.

Taken altogether, Armenian architecture is far more remarkable for elegance than for grandeur, and possesses none of that greatness of conception or beauty of outline essential to an important architectural style. It is still worthy of more attention than it has hitherto received, even for its own sake. Its great title to interest will always be its ethnological value, being the direct descendant of the Sassanian style, and the immediate parent of that of Russia. At the same time, standing on the eastern confines of the Byzantine Empire, it received thence that impress of Christian art which distinguished it from the former, and which it transmitted to the latter. It thus forms one of those important links in the chain of architectural history which when lost render the study of the subject so dark and perplexed, but when appreciated add so immensely to its philosophical interest.

CHAPTER VI.

ROCK-CUT CHURCHES.

CONTENTS.

Churches at Tchekerman, Inkerman, and Sebastopol — Excavations at Kieghart and Vardzie.

INTERMEDIATE between the Armenian province which has just been described and the Russian, which comes next in the series, lies a territory of more than usual interest to the archæologist, though hardly demanding more than a passing notice in a work devoted to architecture. In the neighbourhood of Kertch, which was originally colonised by a people of Grecian or Pelasgic origin, are found numerous tumuli and sepulchres belonging generally to the best age of Greek art, but which, barring some slight local peculiarities, would hardly seem out of place in the cemeteries of Etruria or Crete.

At a later age it was from the shores of the Palus Mœotis and the Caucasus that tradition makes Woden migrate to Scandinavia, bearing with him that form of Buddhism[1] which down to the 11th century remained the religion of the North—while, as if to mark the presence of some strange people in the land, we find everywhere rock-cut excavations of a character, to say the least of it, very unusual in the West.

These have not yet been examined with the care necessary to enable us to speak very positively regarding them;[2] but, from what we do know, it seems that they were not in any instance tombs, like those in Italy and many of those in Africa or Syria. Nor can we positively assert that any of them were viharas or monasteries like most of those in India. Generally they seem to have been ordinary dwellings, but in some instances appropriated by the Christians and formed into churches.

One, apparently, of the oldest, is a rectangular excavation at Tchekerman in the Crimea. It is 37 ft. in length by 21 in width, with hardly any decoration on its walls, but having in the centre a choir with four pillars on each face, which there seems no doubt was originally devoted to Christian purposes. The cross on the low screen that separates it from the nave is too deeply cut and too evidently integral to have been added. But for this, it would seem to have been intended for a Buddhist vihara.

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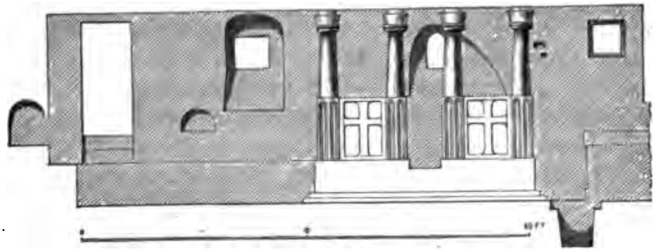
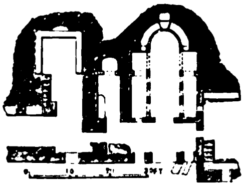
[1] Even if it should be asserted that this is no proof that the inhabitants of these countries were Buddhists in those days, it seems tolerably certain that they were tree-worshippers, which is very nearly the same thing. Procopius tells us that "even in his day these barbarians worshipped forests and groves, and in their barbarous simplicity placed the trees among their gods." ('De Bello Gotico,' Bonn, 1833, ii. 471).

[2] The principal part of the information regarding these excavations is to be found in the work of Dubois de Montpereux, *passim*.

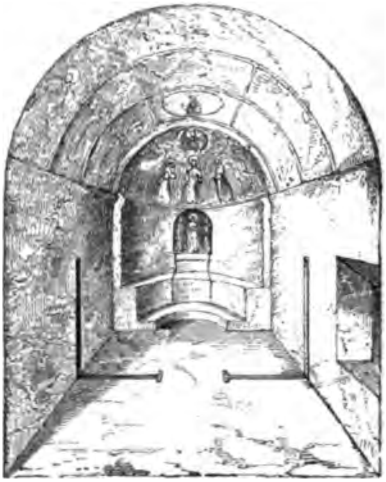


935. Cave of Inkerman. (From Dubois de Montpereux.)

Under the fortress at Inkerman—facing the position held by our army—there is an excavation undoubtedly of Christian origin. It is a small church with side-aisles, apse, and all the necessary accompaniments. Beyond this is a square excavation apparently intended as a refectory, and other apartments devoted to the use of a monastic establishment. These again are so like what we find among the Buddhist excavations in India as to be quite startling. The one point in which this church differs from a Buddhist Chaitya is that the aisle does not run round behind the altar. This is universally the case in Buddhist, but only exceptionally so in Christian, churches.



936. Rock-cut Church at Inkerman. (From Dubois de Montpereux.)



937. View in Church Cave, near Sebastopol.

Close to Sebastopol is another small church cave with its accompanying monastery. This one is said to be comparatively modern, and if its paintings are parts of the original design it may be so, but no certain data are given for fixing the age of the last two examples. That under the fortress (Woodcut No. 936) seems, however, to be of considerable antiquity.

There is one which in plan is very like those just described at Vardzie, said to belong to the 12th century, and another, almost absolutely identical with a Buddhist vihara, at Kieghart in Armenia, which has a date upon it, A.D. 1288.

On the banks of the Kour, however, at Ouplous-Tsikhe and Vardzie, are some excavations which are either temples or monasteries, and which range from the Christian era downwards. These are generally assumed to be residences – one is called the palace of Queen Thamar—and they were evidently intended for some stately purpose. Yet they were not temples in any sense in which that term would be employed by the Greek or Roman world. Whatever their destination, these rock-cut examples make, when taken altogether, as curious a group of monuments as are to be found in this corner of Asia, and which may lead afterwards to curious archæological inferences. At present we are hardly in a position to speculate on the subject, and merely point to it here as one well meriting further investigation.

CHAPTER VII.

MEDIÆVAL ARCHITECTURE OF RUSSIA.

CONTENTS.

Churches at Kieff — Novogorod — Moscow — Towers.

CHRONOLOGY.

	DATES.		DATES.
Rurik the Varangian at Novogorod	A.D. 850	Tartar wars and domination till	A.D. 1480
Olga baptized at Constantinople	955	Ivan III.	1462-1505
St. Vladimir the Great	980–1015	Basil IV.	1505–1533
Yoraslaf died	1055	Ivan IV., or the Terrible	1533–1584
Sack of Kieff	1168	Boris	1598-1605
Tartar invasion under Gengis Khan	1228	Peter the Great	1689-1725

The long series of the architectural styles of the Christian world which has been described in the preceding pages terminates most appropriately with the description of the art of a people who had less knowledge of architecture and less appreciation of its beauties than any other with which we are acquainted. During the Middle Ages the Russians did not erect one single building which is worthy of admiration, either from its dimensions, its design, or the elegance of its details; nor did they invent one single architectural feature which can be called their own. It is true the Tartars brought with them their bulbous form of dome, and the Russians adopted it, and adhere to it to the present day, unconscious that it is the symbol of their subjection to a race they affect to despise: but excepting as regards this one feature, their architecture is only a bad and debased copy of the style of the Byzantine Empire. There is nothing, in fact, in the architecture of the country to lead us to doubt that the mass of the population of Russia was always of purely Aryan stock, speaking a language more nearly allied to the Sanskrit than any of the other Mediæval tongues of Europe, and that whatever amount of Tartar blood may have been imported, it was not sufficient to cure the inartistic tendencies of the race. So much is this felt to be the case, that the Russians themselves hardly lay claim to the design of a single building in their country from the earliest times to the present day. They admit that all the churches at Kieff, their earliest capital, were erected by Greek architects; those of Moscow by Italians or Germans; while those of St. Petersburg, we know, were, with hardly a single exception, erected by Italian, German, or French architects.

These last have perpetrated caricatures of revived Roman architecture worse than are to be found anywhere else. Bad as are some of the imitations of Roman art found in Western Europe, they are all the work of native artists, are, partially at least, adapted to the climate, and common sense peeps through their worst absurdities; but in Russia only second-class foreigners have been employed, and the result is a style that out-herods Herod in absurdity and bad taste. Architecture has languished not only in Russia, but wherever the Sclavonic race predominates. In Poland, Hungary, Moldavia, Wallachia, &c., although some of these countries have at times been rich and prosperous, there is not a single original structure worthy to be placed in comparison with even the second-class contemporary buildings of the Celtic or Teutonic races.

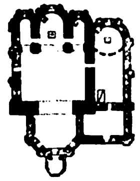
Besides the ethnographic inaptitude of the nation, however, there are other causes which would lead us to anticipate, *à priori*, that nothing either great or beautiful was likely to exist in the mediæval architecture of Russia. In the first place, from the conversion of Olga (964) to the accession of Peter the Great (1689), with whom the national style expired, the country hardly emerged from barbarism. Torn by internal troubles, or devastated by incursions of the Tartars, the Russians never enjoyed the repose necessary for the development of art, and the country was too thinly peopled to admit of that concentration of men necessary for the carrying out of any great architectural undertaking.

Another cause of bad architecture is found in the material used, which is almost universally brick covered with plaster; and it is well known that the tendency of plaster architecture is constantly to extravagance in detail and bad taste in every form. It is also extremely perishable,—a fact which opens the way to repairs and alterations in defiance of congruity and taste, and to the utter annihilation of everything like archæological value in the building.

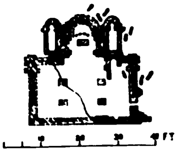
When the material was not brick, it was wood, like most of the houses in Russia of the present day; and the destroying hand of time, aided no doubt by fire and the Tartar invasions, have swept away many buildings which would serve to fill up gaps, now, it is feared, irremediable in the history of the art.

Notwithstanding all this, the history of architecture in Russia need not be considered as entirely a blank, or as wholly devoid of interest. Locally we can follow the history of the style from the south to the north. Springing originally from two roots—one at Constantinople, the other in Armenia—it gradually extended itself northward. It first established itself at Cherson, then at Kieff, and after these at Vladimir and Moscow, whence it spread to the great commercial city of Novogorod. At all these places it maintained itself till supplanted by the rise of St. Petersburg.

Though the Princess Olga was baptised in 964, the general profession of Christianity in Russia did not take place till the reign of Vladimir (981–1015). He built the wooden cathedral at Cherson, which has perished. At Kieff the same monarch built the church of Desiatinna, the remains of which existed till within the last few years, when they were removed to give place to a modern abomination. He also built that of St. Basil in the same city, which, notwithstanding modern improvements, still retains its ancient plan, and is nearly identical in arrangement and form with the Catholicon at Athens (Woodcut No. 905). The plan (Woodcut No. 938) gives a fair idea of the usual dimensions of the older churches of Russia. The parts shaded lighter are subsequent additions.



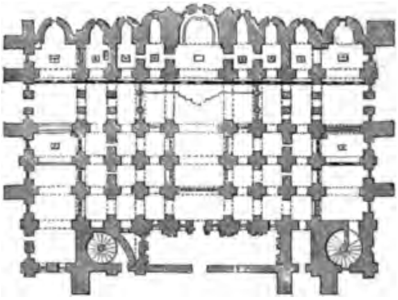
933. Church of St. Basil, Kieff. Scale 100 ft. to 1 in.



939. St. Irene, Kieff.

A greater builder than Vladimir was Prince Yaroslaf (1019-1054). He founded the church of St. Irene at Kieff (Woodcut No. 939), the ruins of which still exist. It is a good specimen of the smaller class of churches of that date.

His great works were the cathedrals of Kieff and Novogorod, both dedicated to Sta. Sophia, and with the church at Mokwi quoted above (Woodcut No. 918) forming the most interesting group of Russian churches of that age. All three belong to the 11th century, and are so extremely similar in plan, that, deducting the subsequent additions from the two Russian examples, they may almost be said to be identical. They also show so intimate a connection between the places on the great commercial road from the Caucasus to the Baltic, that they point out at once the line along which we must look for the origin of the style.



940. Plan of Cathedral at Kieff. Scale 100 ft. to 1 in.

Of the three, that at Kieff[1] (Woodcut No. 940) is the largest; but it is nearly certain that the two outer aisles are subsequent additions, and that the original church was confined to the remaining seven aisles. As it now stands, its dimensions are 185 ft. from north to south, and 136 from east to west. It consequently covers only about 25,000 ft., or not half the usual dimensions of a Western cathedral of the same class. As will be perceived, its plan is like that of th churches of Asia Minor, so far as the central aisles are concerned In lateral extension it resembles a mosque, a form elsewhere ver unusual in Christian churches, but which here may be a Tartar peculiarity. At all events it is generally found in Russian churches which never adopt the long basilican form of the West. If their length in an eastern and western direction ever exceeds the breadth, it is only by taking in the narthex with the body of the church.

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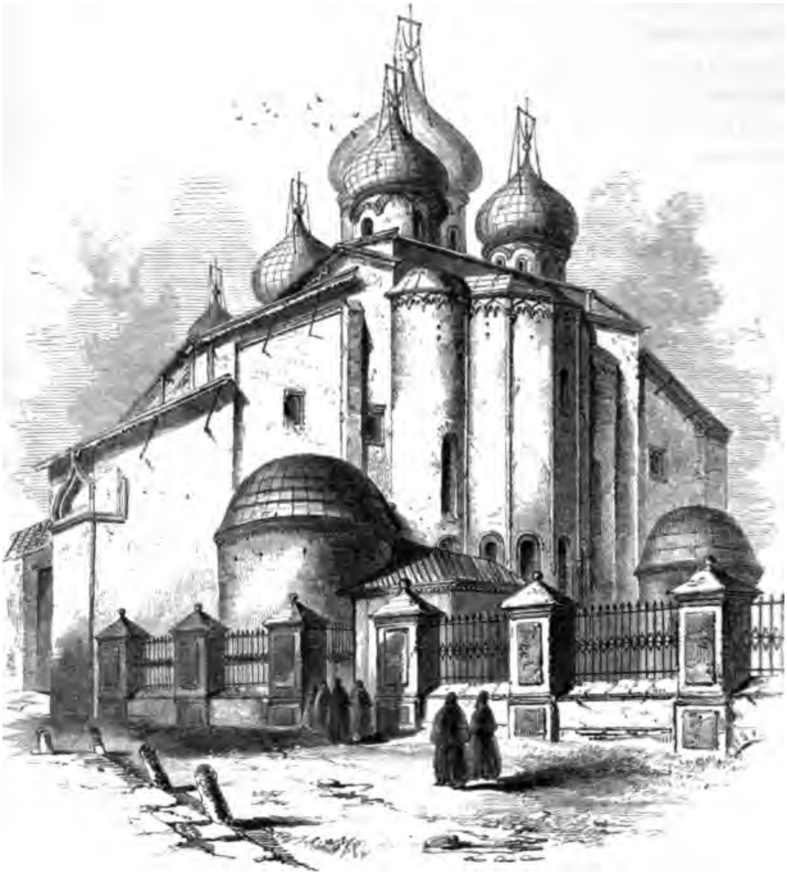
[1] All the plans and information regarding the churches at Kieff are obtained from a Russian work devoted to the subject, procured for me on the spot by Mr. Vignoles, C.E.



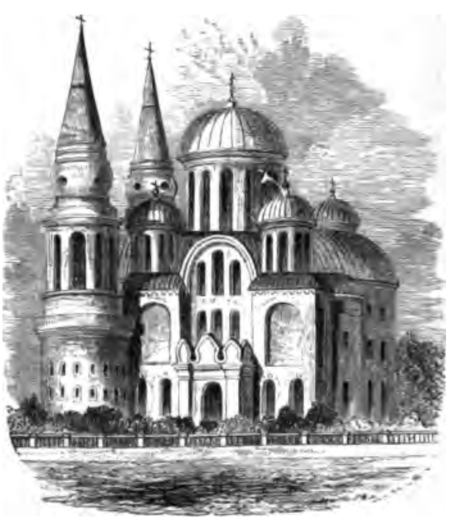
941. East End of the Church at Novogorod. (From a Drawing by A. Durand.)

Internally this church retains many of its original arrangements, and many decorations which, if not original, are at least restorations or copies of those which previously occupied their places. Externally it has been so repaired and rebuilt that it is difficult to detect what belongs to the original work.

In this respect the church of Novogorod has been more fortunate.

Owing to the early decline of the town it has not been much modernised. The interior retains many of its primitive features. Among other furniture is a pair of bronze doors of Italian workmanship of the 12th century closely resembling those of San Zenone at Verona. The part of the exterior that retains most of its early features is the eastern end, represented in the Woodcut No. 941. It retains the long reed-like shafts which the Armenians borrowed from the Sassanians, and which penetrated even to this remote corner. Whether the two lower circular apses shown in the view are old is by no means clear: but it is probable that they are at least built on ancient foundations. The domes on the roof, and indeed all the upper part of the building, belong to a more modern date than the substructure.

The cathedral of Tchernigow, near Kieff, founded 1024, retains perhaps more of its original appearance externally than any other church of its age. Like almost all Russian churches it is square in plan, with a dome in the centre surrounded by four smaller cupolas placed diagonally at the corners. To the eastward are three apses, and the narthex is flanked by two round towers, the upper parts of which, with the roofs, have been modernised, but the whole of the walls remain as originally erected, especially the end of the transept, which precisely resembles what we find in Greek churches of the period.



942. Cathedral at Tchernigow. (From Blasius, 'Reise in Russland.')

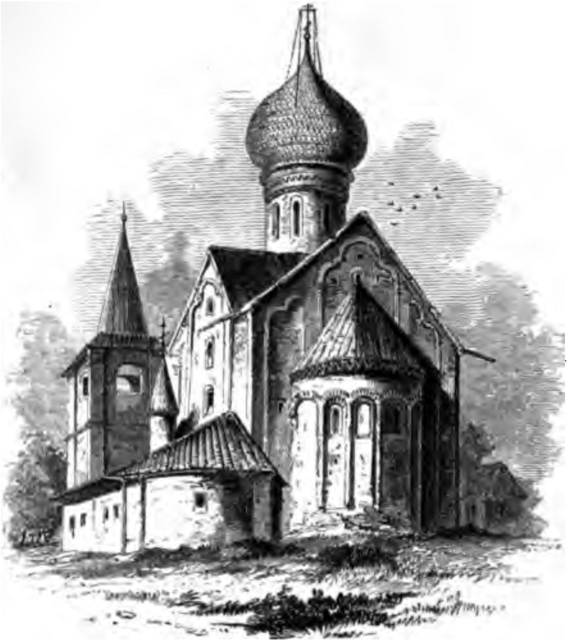
To the same age belong the convent of the Volkof (1100) and of Yourief at Novogorod, the church of the Ascension, and several others at Kieff. All these are so modernised as, except in their plans, to show but slight traces of their origin.

Another of the great buildings of the age was the cathedral of Vladimir (1046). It is said to have been built, like the rest, by Greek artists. The richness and beauty of this building have been celebrated by early travellers, but it has been entirely passed over by more modern writers. From this it is perhaps to be inferred that its ancient form is completely disguised in modern alterations.

The ascendency of Kieff was of short duration. Early in the 13th century the city suffered greatly from civil wars, fires, and devastations of every description, which humbled her pride, and inflicted ruin upon her from which she never wholly recovered.

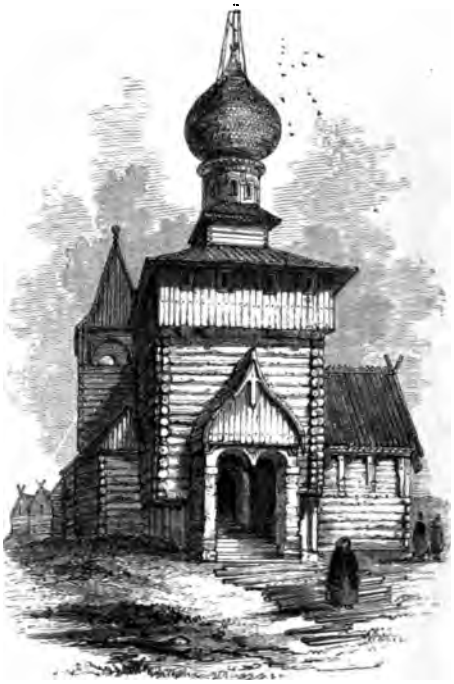
Vladimir was after this the residence of the grand dukes, and in the beginning of the 14th century Moscow became the capital, which it continued to be till the seat of empire was transferred by Peter the Great to St. Petersburg. During these three centuries Moscow was no doubt adorned with many important buildings, since almost every church traces its foundation back to the 14th century; but as fires and Tartar invasions have frequently swept over the city since then, few retain any of the features of their original foundation, and it may therefore perhaps be well to see what can be gleaned in the provinces before describing the buildings of the capital.

As far as can be gathered from the sketch-books of travellers or their somewhat meagre notes, there are few towns of Russia of any importance during the Middle Ages which do not possess churches said to have been founded in the first centuries after its conversion to Christianity; though whether the existing buildings are the originals, or how far they may have been altered and modernised, will not be known till some archæologist visits the country, directing his attention to this particular inquiry. Although the Russians probably built as great a number of churches as any nation of Christendom, yet like the Greek churches they were all undoubtedly small. Kieff is said even in the age of Yaroslaf, to have contained 400 churches, Vladimir nearly as many. Moscow, in the year 1600, had 400 (thirty-seven of which were in the Kremlin), and now possesses many more. Many of the village churches still retain their ancient features; the example here given of one near Novogorod belongs probably to the 12th century, and is not later than the



943. Village Church near Novogorod. (From a Drawing by A. Durand.)

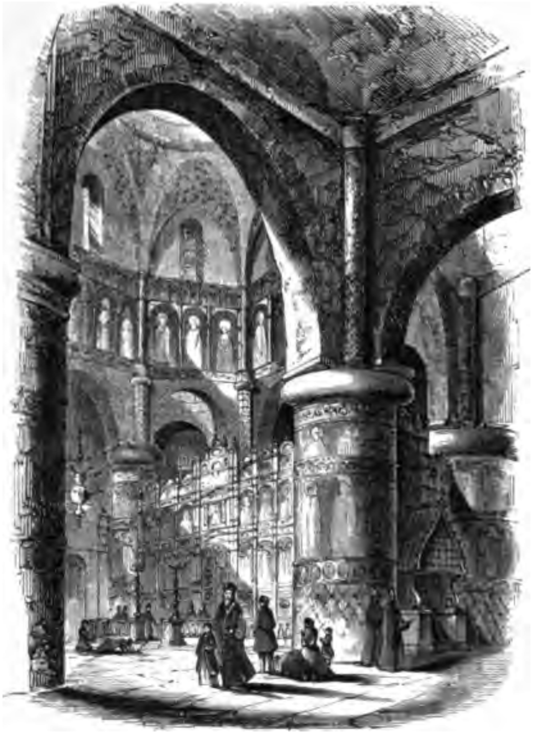
13th. It retains its shafted apse, its bulb-shaped Tartar dome, and, as is always the case in Russia, a square detached belfry—though in this instance apparently more modern than the edifice itself. Woodcut No. 944 is the type of a great number of the old village churches, which, like the houses of the peasants, are of wood, generally of logs laid one on the other, with their round ends intersecting at the angles, like the log-huts of America at the present day. As architectural objects they are of course insignificant, but still they are characteristic and picturesque.



944. Village Church near Tzarskoe Selo. (From Durand.)

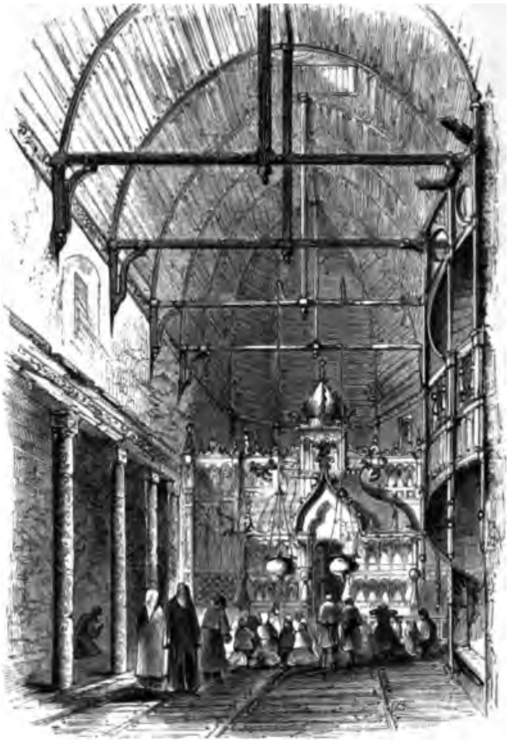
Internally all the arrangements of the stone churches are such as are appropriate for pictorial rather than for sculptural decoration. The pillars are generally large cylinders covered with portraits of saints, and the capitals are plain, cushion-like rolls with painted ornaments. The vaults are not relieved by ribs, or by any projections that could interfere with the coloured decorations. In the wooden churches the construction is plainly shown, and of course is far lighter. In them also colour almost wholly supersedes carving. The peculiarities of these two styles are well illustrated in the two Woodcuts Nos. 945 and 946, from churches near Kostroma in Eastern Russia. Both belong to the Middle Ages, and both are favourable specimens of their respective classes. In these examples, as indeed in every Greek church, the principal object of ecclesiastical furniture is the *iconostasis* or image-bearer, corresponding to the rood-screen that separates the choir from the nave in Latin churches. The rood-screen, however, never assumed in the West the importance which the iconostasis always possessed in the East. There it separates and hides from the church the sanctuary and the altar, from which the laity are wholly excluded. Within it the elements are consecrated, in the presence of the priests alone, and are then brought forward to be displayed to the public. On this screen, as performing so important a part, the Greek architects and artists have lavished the greatest amount of care and design, and in every Greek church, from St. Mark's at Venice to the extreme confines of Russia, it is the object that first attracts attention on entering. It is, in fact, so important that it must be regarded rather as an object of architecture than of church furniture.

The architectural details of these Russian churches must be pronounced to be bad; for, even making every allowance for difference of taste, there is neither beauty of form nor constructive elegance in any part. The most characteristic and pleasing features are the five domes that generally ornament the roofs, and which, when they rise from the *extrados*, or uncovered outside of the vaults, certainly look well. Too frequently, however, the vault is covered by a wooden roof, through which the domes then peer in a manner by no means to be admired. The details of the lower part are generally bad. The view (Woodcut No. 947) of a doorway of the Troitska monastery, near Moscow, is sufficiently characteristic. Its most remarkable feature is the baluster-like pillars of which the Russians seem so fond. These support an arch with a pendant in the middle—a sort of architectural *tour de force* which the Russian architects practised everywhere and in every age, but which is far from being beautiful in itself, or from possessing any architectural propriety. The great roll over the door is also unpleasant. Indeed, as a general rule, wherever in Russian architecture the details are original, they must be condemned as ugly.



945. Interior of Church at Kostroma. (From Durand.)

At Moscow we find much that is at all events curious. It first became a city of importance about the year 1304, and retained its prosperity throughout that century. During that time it was adorned by many sumptuous edifices. In the beginning of the 15th century it was taken and destroyed by the Tartars, and it was not till the reign of Ivan III. (1462–1505) that the city and empire recovered the disasters of that period. It is extremely doubtful if any edifice now found in Moscow can date before the time of this monarch.

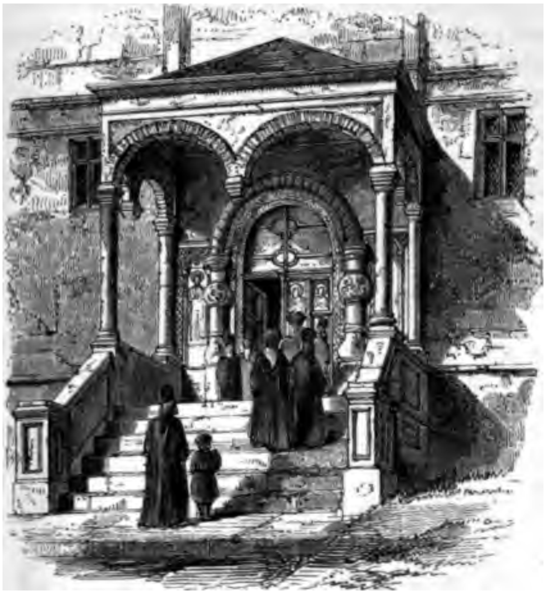


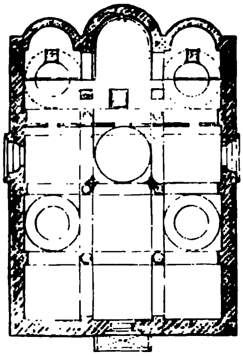
946. Interior of Church near Kostroma. (From Durand.)

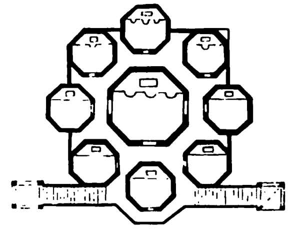
In the year 1479 this king dedicated the new church of the Assumption of the Virgin, said to have been built by one Aristoteles, a native of Bologna, in Italy, who was brought to Russia expressly for the purpose. The plan of it (Woodcut No. 945) gives a good idea of the arrangement of a Russian church of this age. Small as are its dimensions—only 74 ft. by 56 over all externally, which would be a very small parish church anywhere else—the two other cathedrals of Moscow, that of the Archangel Michael and the Annunciation, are even smaller still in plan. Like true Byzantine churches, they would all be exact squares, but that the narthex being taken into the church gives it a somewhat oblong form. In the Church of the Assumption there is, as is almost universally the case, one large dome over the centre of the square, and four smaller ones in the four angles. The great iconostasis runs, as at Sta. Sophia at Kieff, quite across the church; but the two lateral chapels have smaller screens inside which hide their altars, so that the part between the two becomes a sort of private chapel. This seems to be the plan of the greater number of the Russian churches of this age.

But there is one church in Moscow, that of Vassili (St. Basil) Blanskenoy, which is certainly the most remarkable, as it is the most characteristic, of all the churches of Russia. It was built by Ivan the

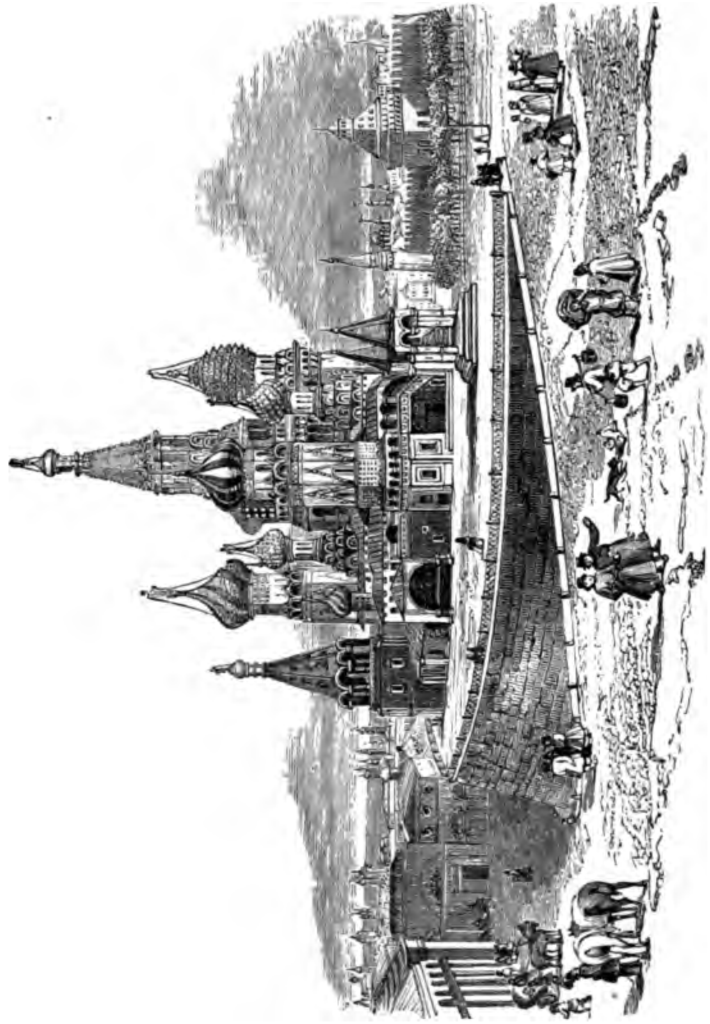
Terrible (1534–1584), and its architect was a foreigner, generally supposed to have come from the West, inasmuch as this monarch sent an embassy to Germany under one Schlit, to procure artists, of whom he is said to have collected 150 for his service. If, however, German workmen erected this building, it certainly was from Tartar designs. Nothing like it exists to the westward. It more resembles some Eastern pagoda of modern date than any European structure, and in fact must be considered as almost a pure Tartar building. Still, though strangely altered by time, most of its forms can be traced back to the Byzantine style, as certainly as the details of the cathedral of Cologne to the Romanesque. The central spire, for instance, is the form into which the Russians had during five centuries been gradually changing the straight-lined dome of the Armenians. The eight others are the Byzantine domes converted by degrees into the bulb-like forms which the Tartars practised at Agra and Delhi, as well as throughout Russia. The arrangement of these domes will be understood by the plan (Woodcut No. 949), which shows it to consist of one central octagon surrounded by eight smaller ones, raised on a platform ascended by two flights of stairs. Beneath the platform is a crypt. For the general appearance the reader must be referred to Woodcut No. 950, for words would fail to convey any idea of so bizarre


947. Doorway of the Troitzka Monastery, near Moscow.


948. Plan of the Church of the Assumption, Moscow. No scale.

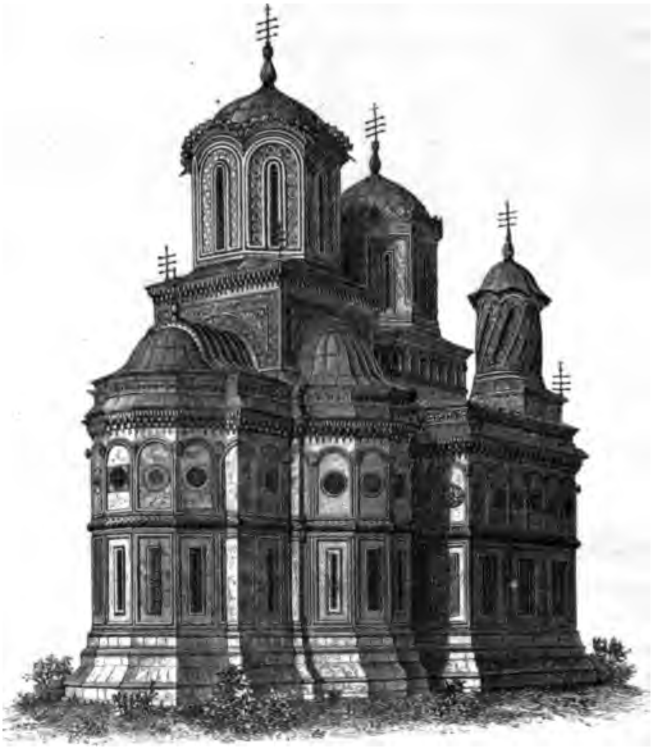

949. Plan of the Church of St. Basil, Moscow. No scale.

and complicated a building. At the same time it must be imagined as painted with the most brilliant colours; its domes gilt, and relieved by blue, green, and red, and altogether a combination of as much barbarity as it is possible to bring together in so small a space. To crown the whole, according to the legend, Ivan ordered the eyes of the architect to be put out, lest he should ever surpass his own handiwork; and we may feel grateful that nothing so barbarous was ever afterwards attempted in Europe.

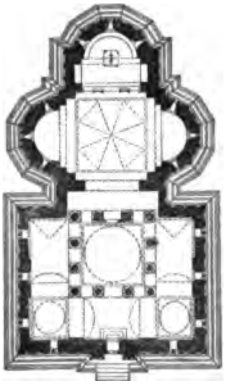


950. View of the Church of Vassili Blanskenoy, Moscow.

Though not strictly speaking in Russia itself, there is at Kurtea d'Argyisch, in Wallachia, 90 miles north-west from Bucharest, a church which is so remarkable, so typical of the style, that it cannot be passed over. It was erected in the first years of the 16th century (1517–1526) by a Prince Nyagon, and is, so far as is at present known, the most elaborate example of the style. All its ornamental details are identical with those found at Ani and other places in Armenia, but are used here in greater profusion and with better judgment than are to be found in any single example in that country. In outline it is not so wild as the Vassili Blanskenoy, but the interior is wholly sacrificed to the external effect, and no other example can well be quoted on which ornamental construction is carried to so great an extent, and generally speaking in such good taste. The twisted cupolas that flank the entrances might as well have been omitted, but the two central domes and the way the semi-domes are attached to them are quite unexceptionable, and altogether, with larger dimensions, and if a little

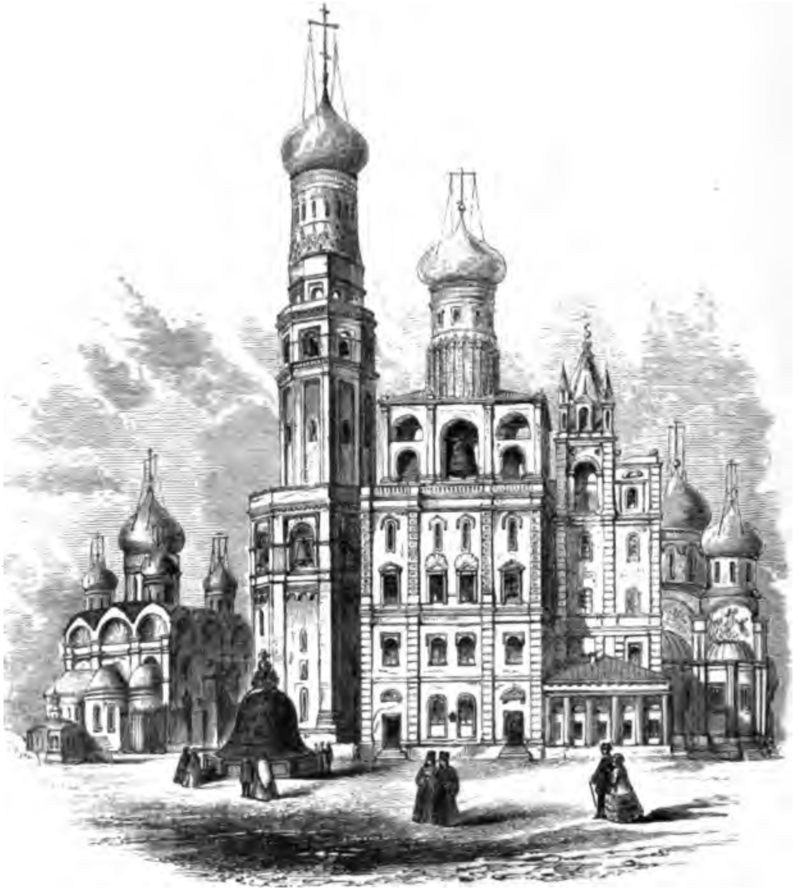


951. View of Church at Kurtea d'Argyisch. (From Jahrbuch der Central Com.)



952. Plan of Church at Kurtea d'Argyisch. Scale 50 ft. to 1 in.

more spread out, it would be difficult to find a more elegant exterior anywhere. As it is only 90 ft. long by 50 wide it is too small for architectural effect, but barring this it is the most elegant example of the Armeno-Russian or Neo-Byzantine architecture which is known to exist anywhere, and one of the most suggestive, if the Russians knew how to use it.[1]



953. Tower of Ivan Veliki, Moscow, with the Cathedrals of the Assumption and the Archangel Gabriel.

Towers.

Next in importance to the churches themselves are the belfries which always accompany them. The Russians seem never to have adopted separate baptisteries, nor did they affect any sepulchral magnificence in their tombs. From the time of Herodotus the Scythians were great casters of metal, and famous for their bells. The specimens of casting of this sort in Russia reduce all the great bells of Western Europe to comparative insignificance. It of course became necessary to provide places in which to hang these bells: and as nothing, either in Byzantine or Armenian architecture, afforded a hint for amalgamating the belfry with the church, they went to work in their own way, and constructed the towers wholly independent of the churches. Of all those in Russia, that of Ivan Veliki, erected by the Czar Boris, about the year 1600, is the finest. It is surmounted by a cross 18 ft. high, making a total height of 269 ft. from the ground to the top of the cross. It cannot be said to have any great beauty, either of form or detail: but it rises boldly from the ground, and towers over all the other buildings of the Kremlin. With this tower for its principal object, the whole mass of building is at least picturesque, if not architecturally beautiful. In the woodcut (No. 953) the belfry is shown as it stood before it was blown up by the French. It has been since rebuilt, and with the cathedrals on either hand, makes up the finest group in the Kremlin.

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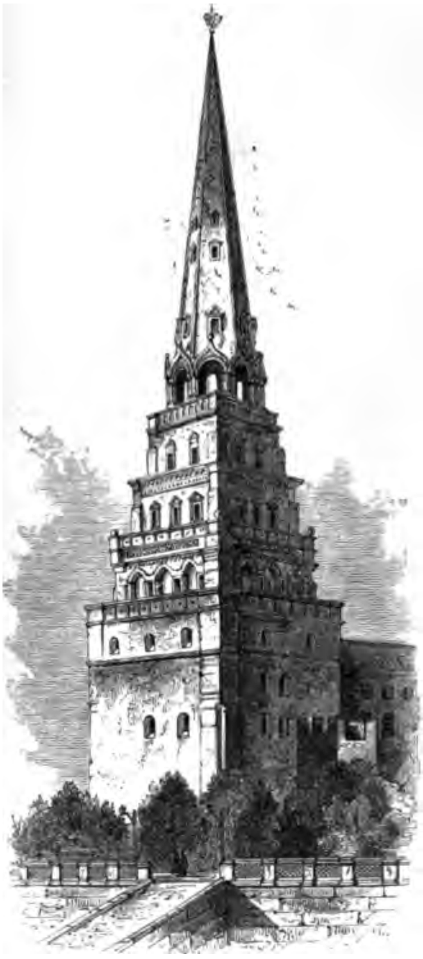
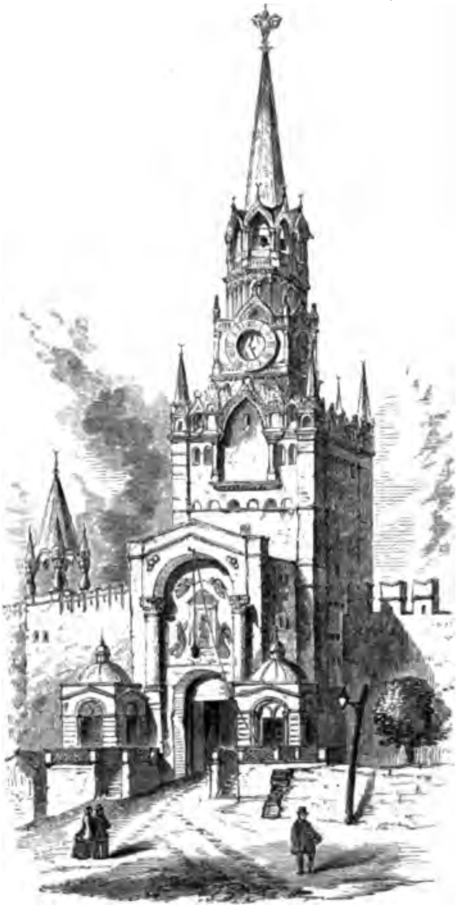
[1] The particulars and illustrations of this church are taken from a paper by Heinrich Reissenberger, in the 'Jahrbuch der K.K. Commission für Enthaltung der Baudenkmale,' 1860. A model of it, full size, was exhibited at the Paris Exhibition of 1867.


954. Tower of Boris, Kremlin, Moscow.

Besides the belfries, the walls of the Kremlin are adorned with towers, meant not merely for military defence, but as architectural ornaments, and reminding us somewhat of those described by Josephus as erected by Herod on the walls of Jerusalem. One of these towers (Woodcut No. 954), built by the same Czar Boris who erected that last described, is a good specimen of its class. It is one of the principal of those which give the walls of the Kremlin their peculiar and striking character.

These towers, however, are not peculiar to the Kremlin of Moscow. Every city in Russia had its Kremlin, as every one in Spain had its Alcazar, and all were adorned with walls deeply machicolated, and interspersed with towers. Within were enclosed five-domed churches and belfries, just as at Moscow, though on a scale proportionate to the importance of the city. It would be easy to select numerous illustrations of this. They are, however, all very much like one another, nor have they sufficient beauty to require us to dwell long on them. Their gateways, however, are frequently important. Every city had its *porta sacra*, deriving its importance either from some memorable event or from miracles said to have been wrought there, and being the triumphal gateways through which all processions pass on state occasions.

The best known of these is that of Moscow, beneath whose sacred arch even the Emperor himself must uncover his head as he passes through; and which, from its sanctity as well as its architectural character, forms an important feature among the antiquities of Russia.



955. Sacred Gate, Kremlin, Moscow.

So numerous are the churches, and, generally speaking, the fragments of antiquity in this country, that it would be easy to multiply examples to almost any extent. Those quoted in the preceding pages are, architecturally, the finest as well as the most interesting, from an antiquarian point of view, of those which have yet been visited and drawn; and there is no reason to believe that others either more magnificent or more beautiful still remain undescribed.

This being the case, it is safe to assert that Russia contains nothing that can at all compare with the cathedrals, or even the parish churches, of Western Europe, either in dimensions or in beauty of detail. Every chapter in the history of architecture must contain something to interest the student: but there is none less worthy of attention than that which describes the architecture of Russia, especially when we take into account the extent of territory occupied by its people, and the enormous amount of time and wealth which has been lavished on the multitude of insignificant buildings to be found in every corner of the empire.

PART III.

SARACENIC AND ANCIENT AMERICAN ARCHITECTURE.

BOOK I.

CHAPTER I.

SARACENIC ARCHITECTURE IN CHRISTIAN COUNTRIES; OR, BYZANTINE SARACENIC.

NOTE.—In consequence of the re-arrangement of the work, as explained above, by which all the Indian chapters are taken out of it and put together in a separate volume by themselves, the third part of the original work is reduced to very limited dimensions. It consists in the first place of those styles of Saracenic art which are in any way connected with the European styles, and which consequently must be studied together with them in order to be understood. But all the Indian developments of the same style are omitted; first, because they have no real or direct connection with the Western styles; and, secondly, because their affinities are much more intimate with the local styles of Hindostan than with those of Europe. When, however, this great branch is cut off, the Saracenic styles west of the Indus do not occupy a very important place in a general history of architecture—nothing that can compare with the great Christian or classical styles, and hardly even with those of Assyria or Egypt.

As the Indian styles necessarily include the Cambodian, Chinese, Japanese, &c., the only styles that remain to be described are those of the New World. Their connexion with other styles is at present so hazy and indefinite that they may be arranged anywhere; but in order to avoid any appearance of prejudging any hypothesis, it may be as well to place them in this part of the work, in juxtaposition with a style with which they cannot be suspected of having any connexion.

INTRODUCTION.

THE first century of the Hejira forms a chapter in the history of mankind as startling from the brilliancy of its events as it is astonishing from the permanence of its results. Whether we consider the first outburst of Mahomedanism as a conquest of one of the most extensive empires of the world by a small and previously unknown people, or as the propagation of a new religion, or as both these events combined, the success of the movement is without a parallel in history. It far surpassed the careers of the great Eastern conquerors in the importance of its effects, and the growth of the Roman Empire in brilliance and rapidity. From Alexander to Napoleon, conquests have generally been the result of the genius of some gifted individual, and have left, after a short period, but slight traces of their transient splendour. Even Rome's conquest of the world was a slow and painful effort compared with that of the Arabians; and though she imposed her laws on the conquered nations, and enforced them by her military organization, she had neither the desire nor the power to teach them a new faith; nor could she bind the various nations together into one great people, who should aid her with heart and hand in the mission she had undertaken.

It was, indeed, hardly possible that a poor and simple, but warlike and independent, people like the Arabs, could long exist close to the ruins of so wealthy and so overgrown an empire as that of Constantinople, without making an attempt to appropriate the spoil which the effeminate hands of its possessors were evidently unable to defend. It was equally impossible that so great a perversion of Christianity as then prevailed in Egypt and Syria could exist in a country which from the earliest ages had been the seat of the most earnest Monotheism, without provoking some attempt to return to the simpler faith which had never been wholly superseded. So that on the whole the extraordinary success of Mahomedanism at its first outset must be attributed to the utter corruption, religious and political, of the expiring empire of the East, as much as to any inherent greatness in the system itself or the ability of the leaders who achieved the great work.

Had it been a mere conquest, it must have crumbled to pieces as soon as completed; for Arabia was too thinly populated to send forth armies to fight continual battles, and maintain so widely extended an empire. Its permanence was owing to the fact that the converted nations joined the cause with almost the enthusiasm of its original promoters; Syria, Persia, and Africa, in turn, sent forth their swarms to swell the tide of conquest and to spread the religion of Islam to the remotest corners of the globe.

To understand either Mahomedan history or art it is essential to bear this constantly in mind, and not to assume that, because the first impulse was given from Arabia, everything afterwards must be traced back to that primitive people: on the contrary, there was no great depopulation, if any, of the conquered countries, no great transplantation of races. Each country retained its old inhabitants, who, under a new form, followed their old habits and clung to their old feelings with all the unchangeableness of the East, and perhaps with even less outward change than is usually supposed. Before the time of Mahomet the Sabean worship of the stars was common to Arabia and Persia, and a great part of the Babylonian Empire. The Jewish religion was diffused through Syria and parts of Arabia. Egypt, long before the time of Mahomet, must have been to a great extent Arabian, as it now wholly is. In all these countries the religion of Mahomet struck an ancient chord that still vibrated among the people, and it must have appeared more as a revival of the past than as the preaching of a new faith. In Spain alone colonization to some extent seems to have taken place, but we must not even there overlook the fact of the early Carthaginian settlements, and the consequent existence of a Semitic people of considerable importance in the south, where the new religion maintained itself long after its extinction in those parts of Spain where no Semitic blood is known to have existed.

So weak, indeed, in the converted countries was the mere Arabian influence, that each province soon shook off its yoke, and, under their own Caliphs, Persia, Syria, Egypt, Africa, and Spain soon became independent States, yielding only a nominal fealty to that Caliph who claimed to be the rightful successor of the Prophet, and, except in faith and the form of religion, the real and essential change was slight, and far greater in externals than in the innate realities of life.

All this is more evident from the architecture than from any other department—without, at least, more study than most people can devote to the subject. The Arabs themselves had no architecture, properly so called. Their only temple was the Kaabah at Mecca, a small square tower, almost destitute of architectural ornament, and more famous for its antiquity and sanctity than for any artistic merit.

It is said that Mahomet built a mosque at Medina—a simple edifice of bricks and palm-sticks.[1] But the Koran gives no directions on the subject, and so simple were the primitive habits of the nomad Arabs, that had the religion been confined to its native land, it is probable that no mosque worthy of the name would ever have been erected. With them prayer everywhere and anywhere was equally acceptable. All that was required of the faithful was to turn towards Mecca at stated times and pray, going through certain forms and in certain attitudes, but whether the place was the desert or the housetop was quite immaterial.

For the first half century after the Mahomedans burst into Syria they seem to have built very little. The taste for architectural magnificence had not yet taken hold of the simple followers of the Prophet, and desecrated churches and other buildings supplied what wants they had. When they did take to building, about the end of the 7th century, they employed the native architects and builders, and easily converted the Christian church with its atrium into a place of prayer; and, then, by a natural growth of style, they gradually elaborated a new style of details and new arrangements, in which it is often difficult to trace the source whence they were derived.

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[1] Abulfeda, ed. Reiske, vol. i. p. 32.

In Egypt the wealth of ancient remains, in particular of Roman pillars, rendered the task easy; and mosques were enclosed and palaces designed and built with less thought and less trouble than had occurred almost anywhere else. The same happened in Barbary and in Spain. In the latter country, especially, a re-arrangement of Roman materials was all that was required. It was only when these were exhausted, after some centuries of toil, that we find the style becoming original; but its form was not that of Syria or of Egypt, but of Spanish birth and confined to that locality.

When the Turks conquered Asia Minor, their style was that of the Byzantine basilicas which they found there, and when they entered Constantinople they did not even care to carry a style with which they were familiar across the Bosphorus, but framed their mosques upon a type of church peculiar to that city, of which Sta. Sophia was the crowning example.

It is true that, after centuries of practice most of these heterogeneous elements became fused into a complete style. This style possesses so much that is entirely its own as to make it sometimes difficult to detect the germs, taken from the older styles of architecture, which gave rise to many of its most striking peculiarities. These, however, are never entirely obliterated. Everywhere the conviction is forced upon us that originally the Moslems had no style of their own, but adopted those which they found practised in the countries to which they came. In other words, the conquered or associated people still continued to build as they had built before their conversion, merely adapting their former methods to the purposes of their new religion. After a time this Mahomedan element thus introduced into the styles of different countries produced a certain amount of uniformity,—increased, no doubt, by the intercommunications arising from the uniformity of religion. In this way at last a style was elaborated, tolerably homogeneous, though never losing entirely the local peculiarities due to the earlier styles out of which it rose, and which still continue to mark most distinctly the various nationalities that made up the great Empire of Islam.

CHAPTER II.

SYRIA AND EGYPT.

CONTENTS.

Mosques at Jerusalem — El-Aksah — Mosque at Damascus — Egypt — Mosques at Cairo — Other African buildings — Mecca.

CHRONOLOGY.

	DATES.		DATES.
The Hejira	A.D. 622	Ibn Touloun at Cairo	A.D. 876
Caliph Omar builds Mosque at Jerusalem	637	El-Azhar	981
Amrou—Mosque at Old Cairo	642	Sultan Barkook	1149
Abd el-Malek builds El-Aksah, at Jerusalem	691	Kaloun	1284
Caliph Walid builds Mosque at Damascus	705	Sultan Hassan	1356

As before mentioned, the earliest mosque of which we have any record was that built by Mahomet himself at Medina. As, however, it contained apartments for his wives, and other rooms for domestic purposes, it might perhaps be more properly denominated a dwelling house than a mosque. Indeed sacred buildings, as we understand them, seem to have formed no part of the scheme of the Mahomedan dispensation. The one temple of this religion was the Kaabah at Mecca, towards which all believers were instructed to turn when they prayed. As with the ancient Jews—one Temple and one God were the watchwords of the faith.

When, however, the Mahomedans came among the temple-building nations, they seem early to have felt the necessity of some material object - some visible monument of their religion; and we find that Omar, when he obtained possession of Jerusalem, in the 15th year of the Hejira, felt the necessity of building a place of prayer towards which the faithful might turn, or rather which should point out to them the direction of Mecca.[1]

According to the treaty of capitulation, in virtue of which the city was ceded to the Moslems, it was agreed that the Christians should retain possession of all their churches and holy places; and no complaint is made of even the slightest attempt to infringe this article during the following three centuries. On the other hand, it was stipulated that a spot of ground should be ceded to Omar, in which he might establish a place of prayer. For this purpose the site of the old Temple of the Jews was assigned to him by the patriarch; that spot being considered sacred by the Moslems, on account of the nocturnal visit of the Prophet, and because they then wished to conciliate the Jews, while, at the same time the spot was held accursed by the Christians on account of the Lord's denunciation and Julian's impious attempt to rebuild it. Here Omar built a small mosque, which still exists; but all the traditions about the place have become so confused by subsequent interchanges between the Christians and themselves, that it is difficult to say whether it is the chamber bearing the name, on the east of the Aksah, and so designated in the accompanying plan (Woodcut No. 956), or that to the west of the same mosque, known as the mosque of the Mogrebins. Most probably it is the former.

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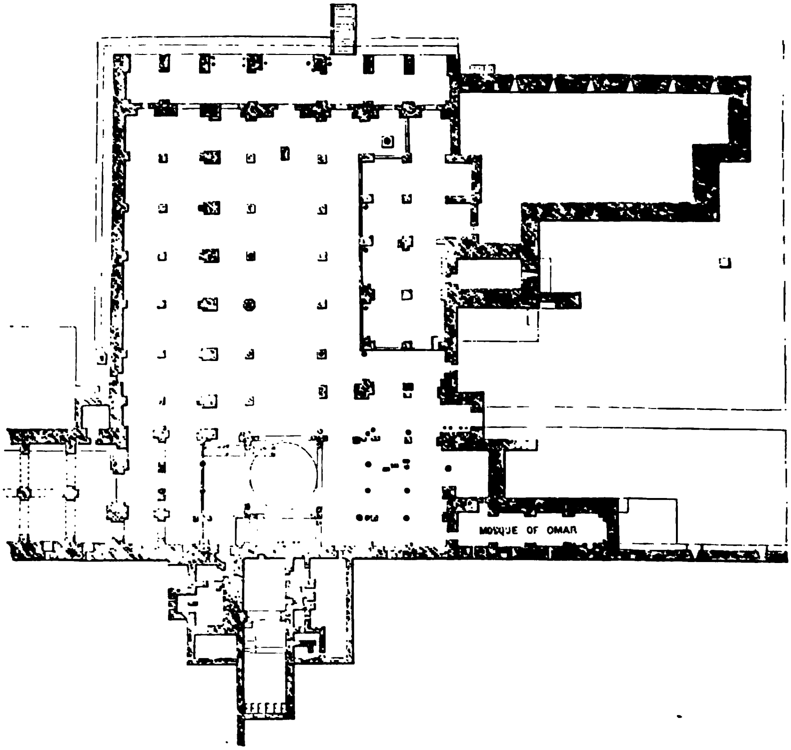
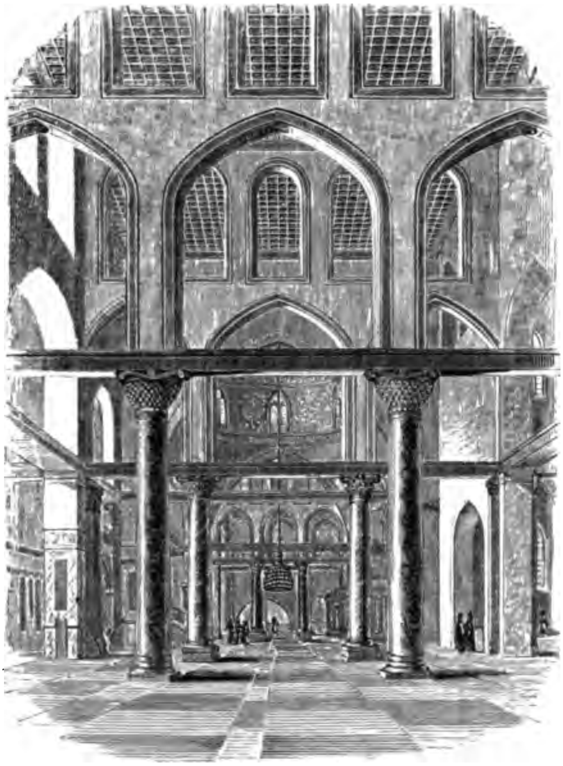
[1] For the particulars of the building of the mosque, I must refer the reader to my work on the 'Ancient Topography of Jerusalem,' where he will find them stated at length.



956. Plan of the Mosque el-Aksah at Jerusalem. Scale 100 ft. to 1 in.

As might be expected from the simplicity of Omar's character, his poverty, and his hatred of everything like ostentation, his mosque is a very simple building, being merely a plain vaulted cell, about 18 ft. wide by nearly 80 in length; it may, however, have extended a little farther westward originally, and a portion of it may have been cut off when the neighbouring Aksah was built, and included within its walls.[1]

The troubles which, during the next half-century, succeeded the murder of Ali and his sons, seem to have been unfavourable to building or any of the arts of peace, and no record has yet been brought to light of any important structure erected during that period. In the 69th year of the Hejira, Abd el-Malek, the Caliph of Damascus, determined to erect a mosque at Jerusalem. His objects were to set up that city as a place of pilgrimage in opposition to Mecca, which was then in the possession of a rival, and to carry into effect what was at one time understood to have been the intention of Mahomet, namely, to convert the temple of Jerusalem into the holy place of his new religion, instead of that of Mecca. These ulterior purposes were never realised, in consequence of the violent opposition which the project met with from the Jews.


957. View in the Mosque el-Aksah at Jerusalem.

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[1] The Mosque of the Mogrebins is also a plain vaulted apartment, 25 ft. by 173.

The mosque which Abd el-Malek erected still remains tolerably unaltered to the present time.[1] The plan (Woodcut No. 956) will show that it is not unlike a Christian basilica of seven aisles, and of considerable dimensions, being 184 ft. wide by 272 in length over all, thus covering about 50,000 sq. ft., or as much as many of our cathedrals. It has a porch, which is a later addition, but has not the usual square court in front, which was an almost invariable accompaniment of Christian basilicas of that date, and still more so of mosques; indeed, these latter took their form from the gradual reduction of the depth of the church-portion of the arrangement, and the increase of the court, which eventually became the mosque itself.

"The interior is supported," says an Arab historian,[2] "by 45 columns, 33 of which are of marble and 12 of common stone,"—many of them no doubt taken from more ancient buildings,—"besides which there are 40 piers of common stone." Arculfus,[3] a Christian monk, who saw it shortly after its erection, describes it with perfect accuracy as a square building, capable of containing about 3000 persons, and mentions the curious peculiarity of the pillars being connected by beams, showing that the construction was then the same as we see now, as is shown in the woodcut (No. 957), which is a view taken across the southern end of the building. The pier-arches are pointed throughout, but above this is a range of openings with circular heads.

This building, with its adjuncts, remained the only place of prayer belonging to the Mahomedans for three centuries after its erection. During the Crusades it was occupied by the knights, who took the name of Templars from residing in a building which was known to occupy the site of the Temple[4] of the Jews. On the recovery of the city it again became the principal mosque, and remains so to this day.

As an architectural object the Aksah is of no great importance. It has no feature of beauty externally except the northern porch, which was added in the fourteenth century. The interior is spacious but barnlike, and has no particular elegance either of arrangement or detail; but it must also be added that it suffers very considerably from its juxtaposition with the Dome of the Rock, from which it differs so essentially in every detail that it is impossible the two could have been erected within several centuries from one another. The perfection of the internal arrangements of the last-named church, and the beauty of its late classical details, make up a whole so nearly perfect that there are few buildings that would not suffer by the comparison, more especially one built by so unarchitectural a people as the Arabs, at so early a part of their career.

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[1] This mosque was first made known to the West by the labours of Messrs. Catherwood, Arundale, and Bonomi. It has since been published by M. de Vogüé and others, and has been open to the inspection of travellers for some time past.

[2] Mejr ed-Deen. 'Fundgruben des Orients,' vol. ii. p. 83.

[3] Adamnanus, Libellus de locis sanctis. Mabillon, 'Acta Sanct. Ord. Bened.' Sæc. III., part II., p. 504 *et seqq.*

[4] The fact of its never having been doubted till the 19th century that the Aksah stands within the precincts of the Jewish Temple, is in itself a sufficient proof that no Christian had ever anything to do with the building of any part of it.

Mosque at Damascus.

As an architectural object the great mosque at Damascus is even more important than the Aksah, and its history is as interesting. The spot on which it stands was originally occupied by one of those small Syrian temples, surrounded by a square *temenos*, of which those at Palmyra and Jerusalem are well-known examples.[1] The one in question was, however, smaller, having been apparently only 450 ft. square; and we do not know the form of the temple which occupied its centre.[2] This temple was converted into a Christian church by Theodosius (395–408), and dedicated to St. John the Baptist, whose chapel still exists within the precincts of the mosque.

According to Jelal ed-Deen,[3] the church remained the joint property of the Christians and Moslems, both praying together in it—or, at least, on the east and west sides of a partition run through it—from the fall of the city in the year of the Hejira 14 (A.D. 636) to the time of the Caliph Walid in the year 86. He offered the Christians either four desecrated churches in exchange for it, or threatened to deprive them of one which they held on sufferance. As soon as the matter was settled, it is said, he pulled down the Christian church, or at least part of it, and in ten years completed the present splendid mosque on its site, having first procured from the emperor at Constantinople fit and proper persons to act as architects and masons in its construction.

If the building were carefully examined by some competent person, it might even now be possible to ascertain what parts belonged to the Heathen, what to the Christians, and what to the Moslems. At first sight it might appear that the covered part of the mosque is only the Christian church, used laterally like that at Ramleh; but its dimensions—126 ft. by 446—are so much in excess of any three-aisled church of that age, that the idea is hardly tenable. On the whole, it seems probable that we must consider that the materials which had first been collected for the Temple, and were afterwards used in the church, were entirely rearranged by the Mahomedans in the form in which we now find them.

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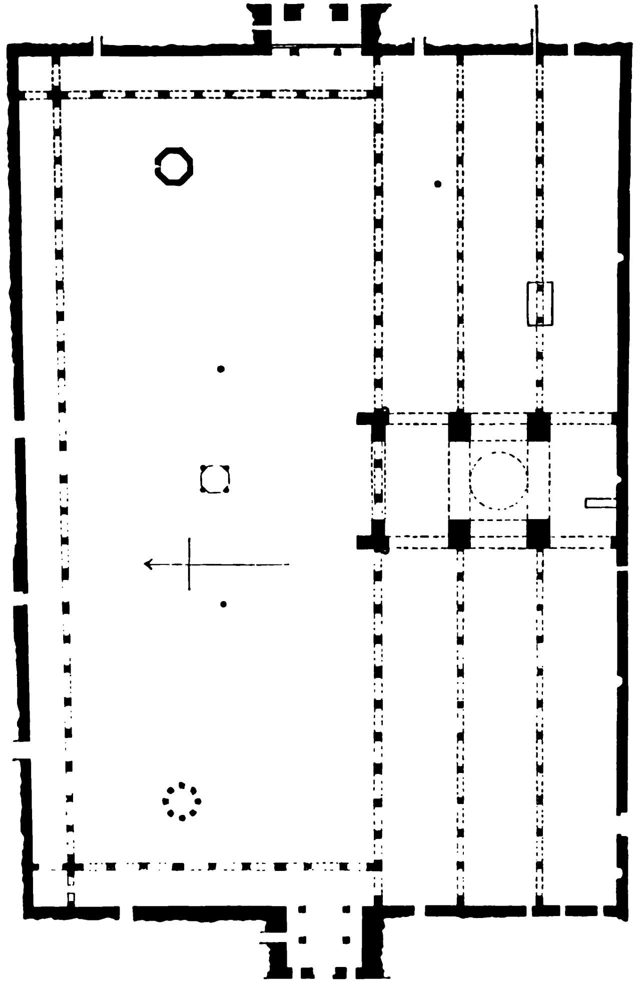
[1] Ante, p. 219.

[2] I state these dimensions very doubtfully, the ground outside the present mosque never having been carefully surveyed by any one competent to restore the original plan.

[3] 'History of Jerusalem,' translated by the Rev. M. Reynolds, p. 409 *et seqq.*

Like all buildings in the first century of the Hejira, it was so badly done that nearly all the pillars of the court have since that time been encased in piers of masonry. The walls have been covered up with plaster, and whitewash has obliterated the decoration which once existed, and which is still visible where the plaster has peeled off. It is still, however, interesting from its history, venerable from its age, and important from its dimensions. These are, externally, 508 ft. by 320, and the enclosed court 400 ft. by 106. So that, in so far as size



958. Plan of Mosque at Damascus. By Captain Wilson, R.E. Scale 100 ft. to 1 in.

is concerned, it may rank among the first of its class; and it has always been considered so sacred, that repairs and additions have constantly been made to it since its erection, more than eleven centuries ago; but, as in the case of its contemporary the Aksah at Jerusalem, the result is far from satisfactory. In this respect, these two buildings form, as just mentioned, a most singular contrast with the Dome of the Rock at Jerusalem (Woodcuts Nos. 867 to 870). That is perfect—solemn and solid, and one of the most impressive buildings in the world, both externally and internally; while the erections of the Moslems are ricketty, in spite of all repairs, and produce no impression of greatness notwithstanding their dimensions and antiquity.

The additions made by the Moslems to the mosque at Hebron (Woodcut No. 841) are mean and insignificant to the last degree; and beyond these, it is difficult to say what there is in Syria built by them that is worthy of attention.

There are some handsome fountains at Jerusalem, some details at Hasbeiya, a few large khans at Beisan and elsewhere, and some very fine city gates and remnants of military architecture; but the tombs are insignificant, and except the two mosques described, there seems to be no example of monumental architecture of any importance. The one building epoch of the country occurred when the Roman influence was at its height, during the first five centuries of the Christian era. Since that time very little has been done, except by the Crusaders, worthy of record; and before it nothing, that, from an architectural point of view, would deserve a place in history.

Egypt.

In Egypt our history begins with the mosque which Amrou, in the 21st year of the Hejira (A.D. 642) erected at Old Cairo; its original dimensions were only 50 cubits, or 75 ft. long, by 30 cubits, or 45 ft. wide. Edrisi[1] says that it was originally a Christian church which the Moslems converted into a mosque; and its dimensions and form would certainly lead us to suppose that, if not so, it was at least built after the pattern of the Christian churches of that age. As early, however, as the 53rd year of the Hejira it was enlarged, and again in the 79th; and it apparently was almost wholly rebuilt by the two great builders of that age, Abd el-Malek and Walid, the builders of the mosques of Jerusalem and Damascus.

It probably now remains in all essential parts as left by these two Caliphs, though frequently repaired, and in some parts probably altered by subsequent sovereigns of Egypt. In its present state it may be considered as a fair specimen of the form which mosques took when they had quite emancipated themselves from the Christian models, or rather when the court before the narthex of the Christian church had absorbed the basilica, so as to become itself the principal part of the building, the church part being spread out into a mere deep colonnade, and its three apsidal altars modified into niches pointing towards the sacred Mecca.

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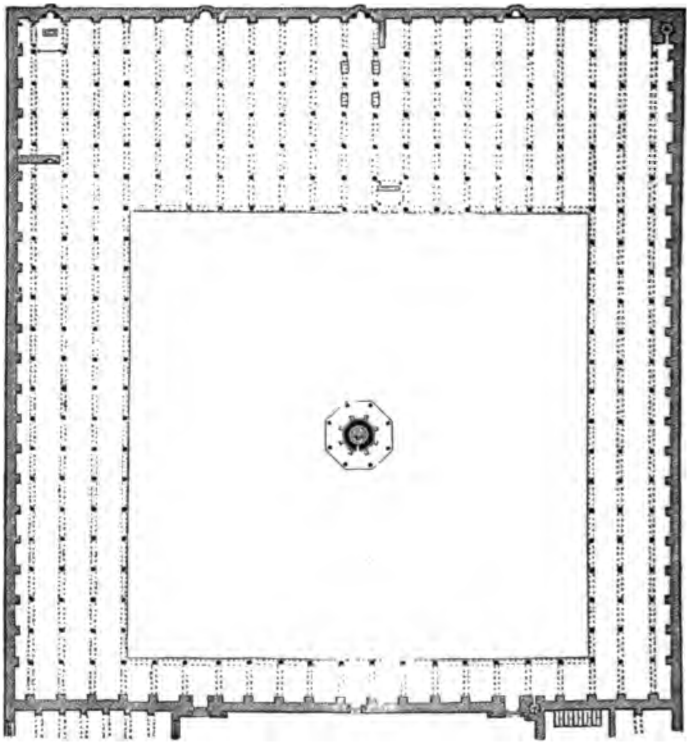
[1] Translated by Jaubert, tom. i. p. 303. The particulars of the description in the text are taken from M. Girault de Prangey 'Monumens Arabes,' compared with M. Coste's 'Edifices de Caire.'



959. Mosque of Amrou, Old Cairo. (From Coste's 'Architecture Arabe.') Scale 100 ft. to 1 in.

As will be seen from the plan (Woodcut No. 959), it is nearly square (390 ft. by 357), and consists of a court-yard, 255 ft. square, surrounded on all sides by porticoes, supported by 245 columns taken from older edifices of the Romans and Byzantines. These were joined together by brick arches of circular form,[1] tied at their springing by wooden beams, as in the Aksah, and covered by a wooden roof. All this part of the mosque, however, has been so often repaired and renovated, that but little of the original details can now remain.

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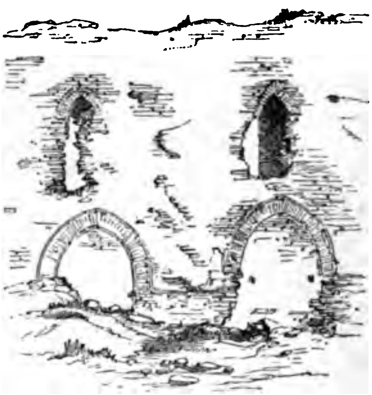
[1] M. Coste makes all these arches pointed. M. de Prangey states that they are all circular; the truth being that they are partly one, partly the other.

Of the original mosque, or perhaps church, the only part that can with certainty be said to exist is a portion of the outer wall, represented in Woodcut No. 960, which possesses the peculiarity of being built with pointed arches, similar in form to those of the Aksah at Jerusalem. They are now built up, and must have been so at the time of one of the earlier alterations; still they are, from their undoubted antiquity, a curious contribution to the much-contested history of the pointed arch. Notwithstanding the beautiful climate of Egypt, the whole mosque is now in a sad state of degradation and decay, arising principally from its original faulty construction. Owing to the paucity of details, many of M. Coste's restorations must be taken as extremely doubtful.



960. Arches in the Mosque of Amrou. (From G. de Prangey's Work.)

From the time of the great rebuilding of the mosque of Amrou under Walid, there is a gap in the architectural history of Egypt of nearly a century and a half, during which time it is probable that no really great work was undertaken there, as Egypt was then a dependent province of the great Caliphat of the East. With the recovery, however, of something like independence, we find one of its most powerful rulers, Ibn Touloun, commencing a mosque at Cairo (A.D. 876), which, owing to its superior style of construction, still remains in tolerable perfection to the present day.[1]

Tradition, as usual, ascribes the design to a Christian architect, who, when the Emir declined to use the columns of desecrated churches for the proposed mosque, offered to build it entirely of original materials. He was at first thrown into prison through the machinations of his rivals; but at last, when they found they could not dispense with his services, was again sent for, and his design carried out.[2]

Be this as it may, the whole style of the mosque shows an immense advance on that of its predecessor, all trace of Roman or

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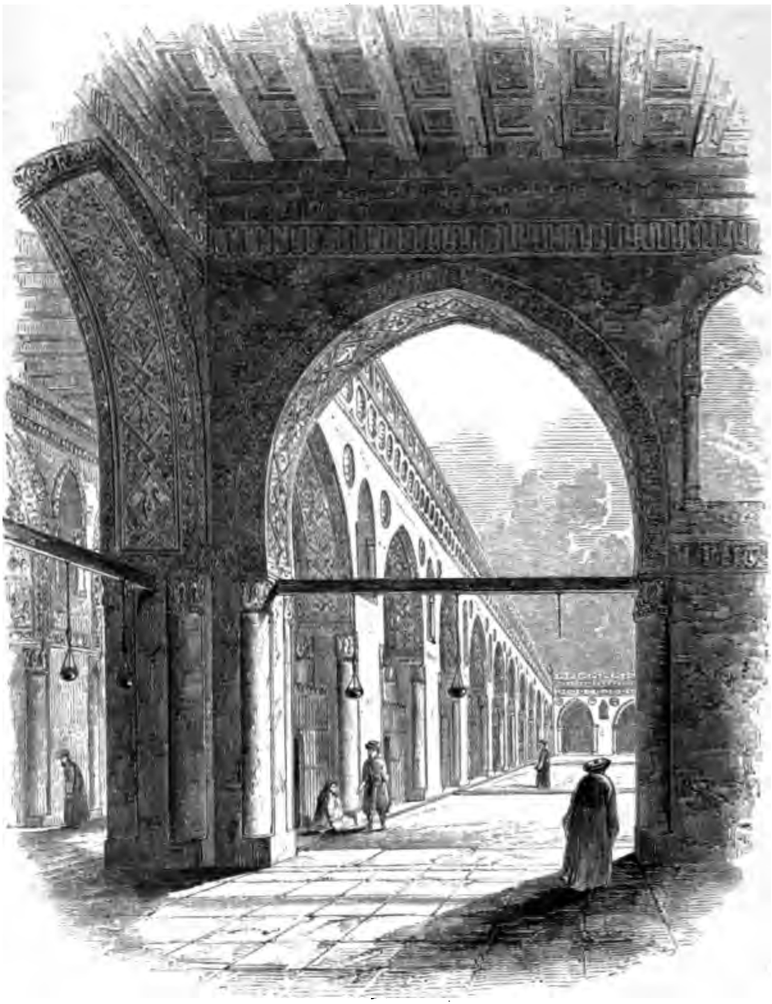
[1] This was quite true when I first saw it and wrote these lines. Since then the arches have been built up, and it has been converted into a hospital, and I fear irretrievably ruined.

[2] See Coste's 'Edifices de Caire,' p. 32, quoting from Makrisi.

Byzantine art having disappeared in the interval, and the Saracenic architecture appearing complete in all its details, the parts originally borrowed from previous styles having been worked up and fused into a consentaneous whole. Whether this took place in Egypt itself during the century and a half that had elapsed, is by no means clear; and it is more than probable that the brilliant Courts of Damascus and Bagdad did more than Egypt towards bringing about the result. At all events, from this time we find no backsliding; the style in Egypt at last takes its rank as a separate and complete architectural form.



961. Mosque of Ibn Touloun at Cairo. (From Coste's 'Architecture Arabe.')

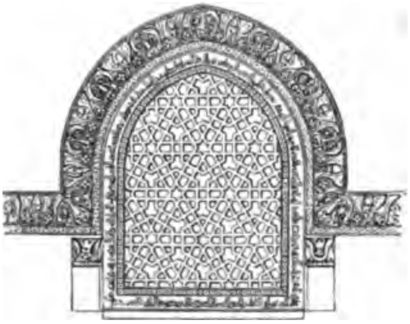
It is true, nevertheless, that in so rich a storehouse of materials as Egypt, the architects could not always resist appropriating the remains of earlier buildings; but when they did this, they used them so completely in their own fashion, and so worked them into their own style, that we do not at once recognise the sources from which they are derived.

To return, however, to the mosque of Touloun. Its general arrangement is almost identical with that of the mosque of Amrou, only with somewhat increased dimensions, the court being very nearly 300 ft. square, and the whole building 390 ft. by 455. No pillars whatever are used in its construction, except as engaged corner shafts; all the arches, which are invariably pointed, being supported by massive piers. The court on three sides has two ranges of arcades, but on the side towards Mecca there are five; and with this peculiarity, that instead of the arcades running parallel to the side, as in a Christian church, or in the mosque of Amrou, they run across the mosque from east to west, as they always did in subsequent examples.

The whole building is of brick, covered with stucco; and fortunately almost every opening is surrounded by an inscription in the old form of Cufic characters, which were then used, and only used about the period to which the mosque is ascribed, so that there can be no doubt as to its date. Indeed, the age both of the building itself, and of all its details, is well ascertained.

The Woodcut No. 961 will explain the form of its arcades, and of the ornaments that cover them. Their general character is that of bold and massive simplicity, the counterpart of our own Norman style. A certain element of sublimity and power, in spite of occasional clumsiness, is common to both these styles. Indeed, excepting the Hassanee mosque, there is perhaps no mosque in Cairo so imposing and so perfect as this, though it possesses little or nothing of that grace and elegance which we are accustomed to expect in this style.

Among the more remarkable peculiarities of this building is the mode in which all the external openings are filled with that peculiar sort of tracery which became as characteristic of this style as that of the windows of our churches five centuries afterwards is of the Gothic style. With the Saracens the whole window is filled, and the interstices are small and varied; both which characteristics are


962. Window in Mosque of Ibn Touloun.

appropriate when the window is not to be looked out of, or when it is filled with painted glass; but of course are utterly unsuitable to our purposes. Yet it is doubtful, even now, whether the Saracenic did not excel the Gothic architects, even in their best days, in the elegance of design and variety of invention displayed in the tracery of their windows. In the mosque of Ibn Touloun it is used as an old and perfected invention, and with the germs of all those angular and flowing lines which afterwards were combined into such myriad forms of beauty.

It is possible that future researches may bring to light a building, 50 or even 100 years earlier than this, which may show nearly as complete an emancipation from Christian art; but for the present, it is from the mosque of Touloun (A.D. 885) that we must date the complete foundation of the new style. Although there is considerable difficulty in tracing the history of the style from the erection of the mosques of Damascus and Jerusalem to that of Touloun, there is none from that time onwards. Cairo alone furnishes nearly sufficient materials for the purpose.

The next great mosque erected in this city was El-Azhar, or "the splendid," commenced in the year 981, or about a century after that of Touloun, and, though certainly a very magnificent building, and showing a great advance in elegance of detail over that last named, it is far from being so satisfactory, owing to the introduction of ancient pillars in parts, and to masses of wall being placed on them, only suited to such forms as those used in the mosque of Touloun.

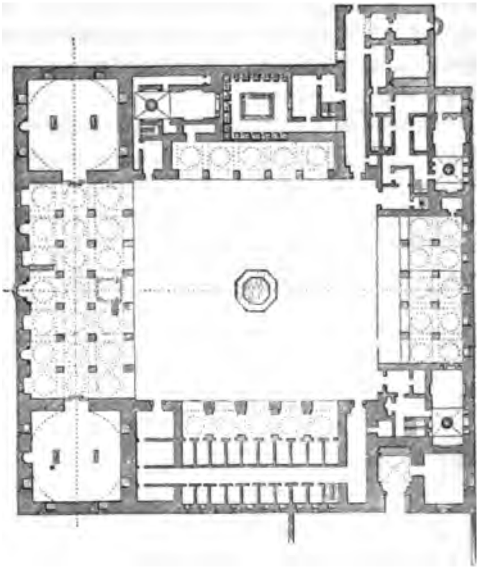
The buildings during the next century and a half are neither numerous nor remarkable for size, though progress is very evident in such examples as exist; and in the middle of the twelfth century we find the style almost entirely changed.

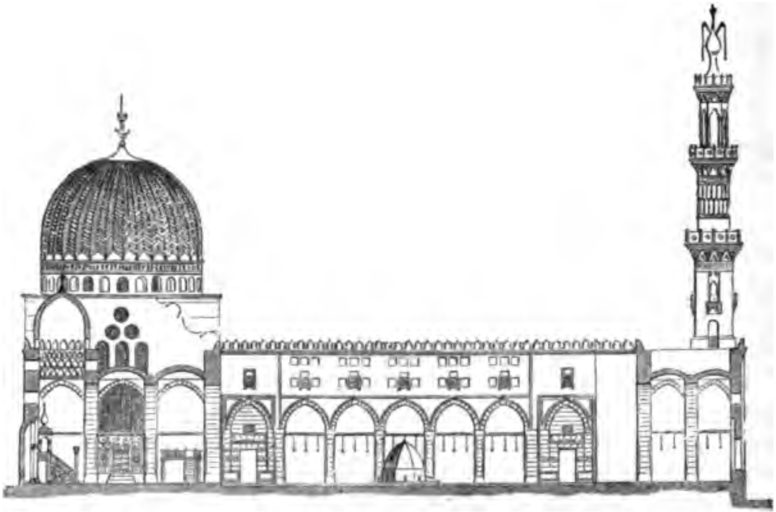
One of the finest buildings of the last age is that built by Sultan Barkook outside the walls of Cairo (A.D. 1149), which, besides a mosque, contains an additional feature in the great sepulchral chambers which are in fact the principal part of the edifice, and betray the existence of a strong affinity to the tomb-building races in the rulers of Egypt at that time.

The plan and section (Woodcuts Nos. 963, 964), though small, will show the state to which the art had at that period arrived in Egypt. The pointed arch, as will be observed, is used with as much lightness and elegance as ever it reached in the West.

The dome has become a truly graceful and elaborate appendage, forming not only a very perfect ceiling inside, but a most imposing ornament to the exterior. Above all, the minaret has here arrived at as high a degree of perfection as it ever reached in any after age.

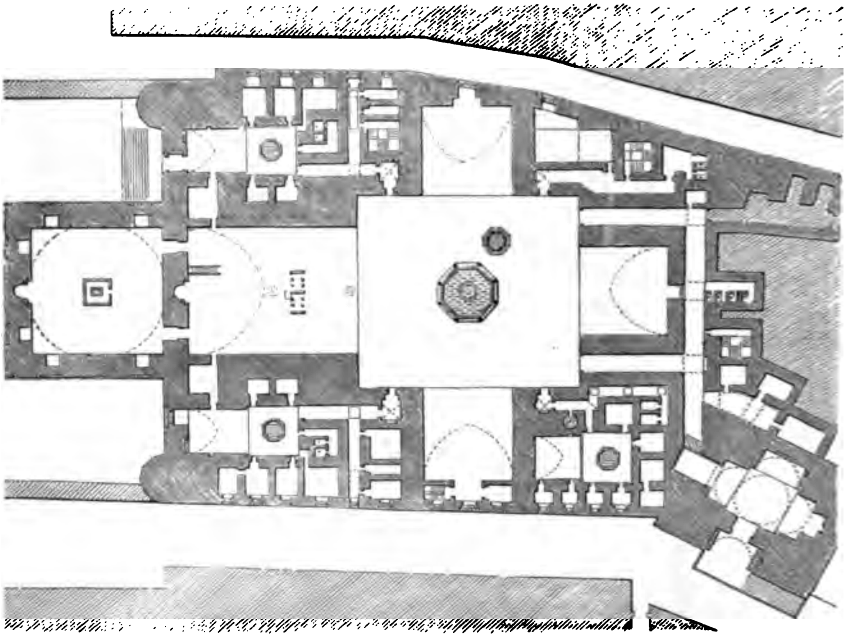
The oldest known example of this species of tower is that of the mosque of Ibn Touloun, but it is particularly ungraceful and clumsy. The minaret in that of Amrou was probably a later addition. Those of the Azhar, which are probably of the date of that mosque, almost equal the one represented in the woodcut; but it is only here that they seem to have acquired that elegance and completeness which render them perhaps the most beautiful form of tower architecture in the world. Our prejudices are of course with the spires of our Gothic churches, and the Indians erected some noble towers; but taken altogether, it is doubtful if anything of its class ever surpassed the beauty and elegance of the minarets attached to the mosques during this and the two or three subsequent centuries.


963. Plan of Mosque and Tombs of Sultan Barkouk. (From Coste.) Scale 100 ft. to 1 in.


964. Section of Mosque of Barkook. (From Coste's 'Architecture Arabe.')

The mosque of Kaloun and the hospital attached to it (A.D. 1284) are both noble buildings, full of the most elegant details, and not without considerable grandeur in parts. In all except detail, however, they must yield the palm to the next great example, the mosque with which the Sultan Hassan adorned Cairo in the year 1356. In some respects it is one of the most remarkable mosques ever erected in any country, and differing considerably from any other with which we are at present acquainted.

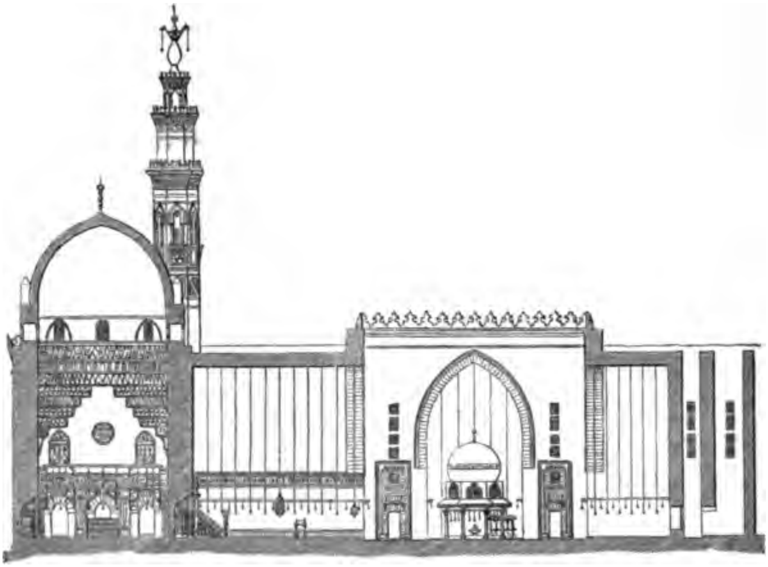
As will be seen from the plan (Woodcut No. 965), its external form is very irregular, following on all sides the lines of the streets within which it is situated. This irregularity, however, is not such as to detract from its appearance, which is singularly bold and massive on every side; the walls being nearly 100 ft. in height, and surmounted by a cornice, which adds another 13 ft., and projects about 6 ft. This great height is divided into no less than nine storeys of small apartments; but the openings are so deeply recessed, and the projections between them so bold, that, instead of cutting it up and making it look like a factory, which would have been the case in England, the building has all the apparent solidity of a fortress, and seems more worthy of the descendants of the ancient Pharaohs than any work of modern times in Egypt.



965. Mosque of Sultan Hassan. (From Coste's 'Architecture Arabe.') Scale 100 ft to 1 in.

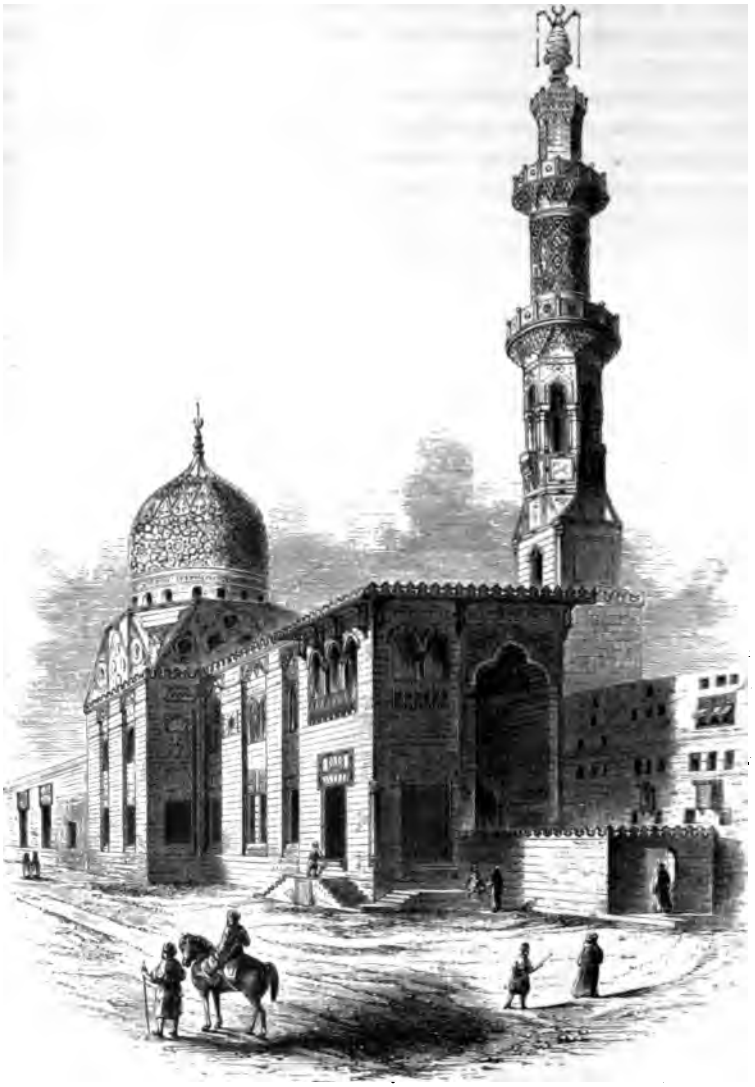
Internally there is a court open to the sky, measuring 117 ft. by 105, enclosed by a wall 112 ft. in height. Instead of the usual colonnades or arcades, only one gigantic niche opens in each face of the court. On three sides these niches measure 46 ft. square; but on that which faces Mecca, the great niche is 69 ft. wide by 90 in depth, and 90 ft. high internally. All four are covered with simple tunnel-vaults of a pointed form, without either ribs or intersections, and for simple grandeur are unrivalled by any similar arches known to exist anywhere.

Behind the niche pointing towards Mecca is the tomb of the founder, square in plan, as these buildings almost always are, measuring 69 ft. each way, and covered by a lofty and elegant dome resting on pendentives of great beauty and richness. It is flanked on each side by two noble minarets, one of which is the highest and largest in Cairo and probably in any part of the world, being 280 ft. in height and of proportionate breadth. Its design and outline, however, are scarcely so elegant as some others, though even in these respects it must be considered a very beautiful example of its class.



966. Section of Mosque of Hassan, Cairo. Scale 100 ft. to 1 in.

One of the principal defects of this building is the position of its doorway, which, instead of facing the *kibleh* or niche pointing towards Mecca, is placed diagonally, in the street alongside of the building. It is a very beautiful specimen of architecture in itself; still its situation and the narrow passages that lead from it to the main building detract most materially from the effect of the whole edifice, which in other respects is so perfect. It may have been, that ground could not be obtained for the purpose of placing the entrance in the right position; but more probably it was so arranged for the sake of defence, the whole structure having very much the appearance of a fortalice, and being without doubt, erected to serve that purpose, as well as being adapted for a house of prayer.



967. Mosque of Kaitbey. (From Coste's 'Architecture Arabe.')

The mosque El Moyed, erected in 1415 A.D., is a singularly elegant specimen of a mosque with columns. Externally it measures about 300 ft. by 250, and possesses an internal court, surrounded by double colonnades on three sides, and a triple range of arches on the side looking towards Mecca, where also are situated—as in that of Barkook—the tombs of the founder and his family. A considerable number of ancient columns have been used in the erection of the building, but the superstructure is so light and elegant, that the effect is agreeable; and of the "mixed mosques"—*i.e.*, those where ancient materials are incorporated—this is one of the most pleasing specimens.

Perhaps the most perfect gem in or about Cairo is the mosque and tomb of Kaitbey (Woodcut No. 967), outside the walls, erected A.D. 1463. Looked at externally or internally, nothing can exceed the grace of every part of this building. Its small dimensions exclude it from any claim to grandeur, nor does it pretend to the purity of the Greek and some other styles; but as a perfect model of the elegance we generally associate with the architecture of this people, it is perhaps unrivalled by anything in Egypt, and far surpasses the Alhambra or the other Western buildings of its age.

After this period there were not many important buildings erected in Cairo, or indeed in Egypt; and when a new age of splendour appears, the old art is found to have died out, and a renaissance far more injurious than that of the West has grown up in the interval. In modern Europe the native architects wrought out the so-called restoration of art in their own pedantic fashion; but in the Levant the corresponding process took place under the auspices of a set of refugee Italian artists, who engrafted their would-be classical notions on the Moorish style, with a vulgarity of form and colour of which we have no conception. In the later buildings of Mehemet Ali and his contemporaries we find the richest and most beautiful materials used so as to make us wonder how men could so pervert every notion of beauty and propriety to the production of such discordant ugliness.

From its size and the beauty of the materials, the mosque erected by the late Pasha in the citadel of Cairo ought to rival any of the more ancient buildings in the city; but as it is, nothing can be worse or more uninteresting.[1]

MECCA.

In a history of the Mahomedan religion a description of the mosque at Mecca would naturally take the first place; but in a work devoted to architecture it is sufficient to mention it in connection with Egypt, to whose sultans it owes whatever architectural adornment it possesses. The Kaabah, or holy shrine itself, has no architecture, and is famous only for its sanctity.

In the earlier centuries of the Hejira the area seems to have been surrounded by a cloister of no great magnificence, but after a great fire which occurred in 1399, the north and west sides were rebuilt in a more splendid manner by Barkook, Sultan of Egypt, whose mosque and tomb are illustrated, Woodcuts Nos. 963, 964. In 1500 El Ghoury, likewise an Egyptian sultan of Memlook race, rebuilt the Bab Ibrahim. The next repairs were due to the sultans of Constantinople. Selim I., in 1572, rebuilt one side, and in 1576 Murad effected a general repair of the whole, and left it pretty much as we now find it.

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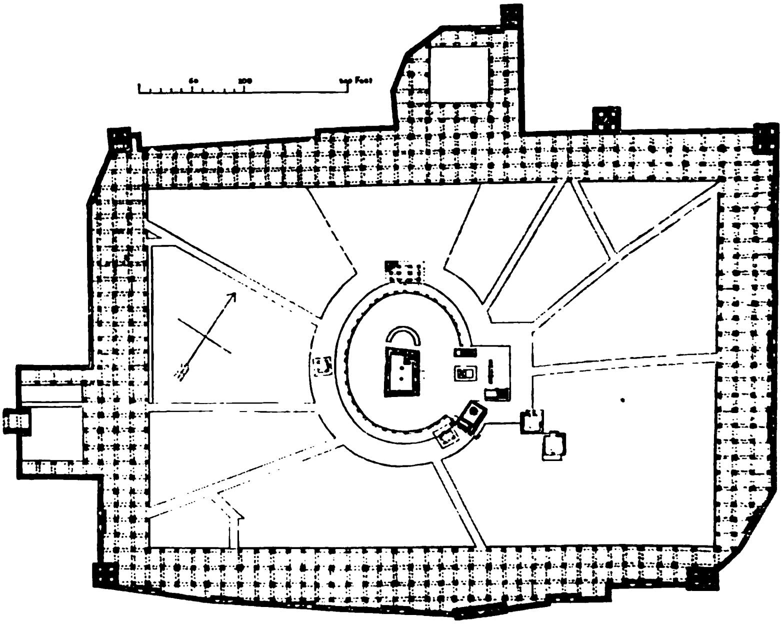
[1] A view of it will be found in vol. iv. p. 488.

It need hardly be pointed out that in arrangement it necessarily differs from all other mosques. The precept of the Koran was, that all true believers when they prayed should turn to the Kaabah, and a mosque consequently became a mere indicator of the direction in which Mecca stood; but in this instance, with the Kaabah in the centre, no mihrab or indication was possible. All that was required was a *temenos* to enclose the sacred object and exclude the outside world with its business from the hallowed precincts.



968. Great Mosque at Mecca. (From a Plan by Ali Bey.[1])

The principal object in the enclosure is of course the Kaabah, a small, low tower, nearly but not quite square in plan, the longer sides 39 and 40 ft. respectively; the shorter 31 and 33 ft.; its height is 36 ft. The entrance is near one corner, at a height of 6 ft. from the ground.

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[1] To get it within the page, the scale of the plan is reduced to 200 French, or 212 English ft. to 1 in.

It is wholly without architectural ornament, and the upper part is covered by a black cloth, which is annually renewed. Next in importance to this is the Zemzem, or holy spring, which is said to have gushed out on this spot to the succour of Ishmael and his mother when perishing of thirst. These two objects are joined by a railing surrounding the Kaabah, except at one point, where it joins the Zemzem. The railing probably marks the enclosure of the old Pagan temple before Mahomet's time.

These, with some other subordinate buildings, now stand in a courtyard, forming a perfect rectangle of about 380 ft. by 570 internally, surrounded by arcades on all sides. These vary considerably in depth, so as to accommodate themselves to the external outline of the building, which, as shown in the Woodcut (No. 968) is very irregular. It is entered on all sides by nineteen gateways, some of which are said to be of considerable magnificence, and it is adorned by seven minarets. These are placed very irregularly, and none of them are of particular beauty or size.

On the longer sides of the court there are thirty-six arches, on the shorter twenty-four, all slightly pointed. They are supported by columns of greyish marble, every fourth being a square pier, the others circular pillars.

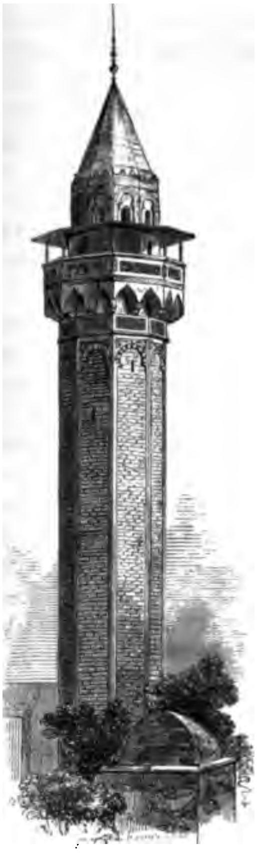
Neither its ordonnance, nor, so far as we can understand, its details, render the temple an object of much architectural magnificence. Even in size it is surpassed by many, and is less than its great rival, the temple of Jerusalem, which was 600 ft. square. Still it is interesting, as it is in reality the one temple of the Moslem world; for though many mosques are now reputed sacred, and as such studiously guarded against profanation, this pretended sanctity is evidently a prejudice borrowed or inherited from other religions, and is no part of the doctrine of the Moslem faith, which, like the Jewish, points to one only temple as the place where the people should worship, and towards which they should turn in prayer.

BARBARY.

There may be—no doubt are—many buildings erected by the Moslems in the countries between Egypt and Spain; but, strange to say, with their love of art, and opportunities for investigating them, the French have not yet made us acquainted with their peculiarities. Even if not magnificent in themselves, they must form a curious link between the styles of the East and the West. In so far as we at present know, Moorish art in Spain is cut off from all connexion with the East, and stands utterly alone. If for no other reason than for the light it would throw on the origin and progress of the Saracenic style in Spain, it would be extremely interesting to know what took

place in the North of Africa during the first centuries of the Hejir
The religious bigotry of the inhabitants of the Regency of Tunis
no doubt one cause why we know so little, but more may probably
owing to the indifference of travellers.

The mosque at Kairwan is one of those buildings about which
would be especially interesting to know something. That city w
long the capital of the African provinces
the empire of the Caliphs, and it was then
that they spread their religion into t
centre of the great continent where it
located, and conquered Sicily. The mosq
was erected, or at least commenced, in t
1st century of the Hejira, and was bui
principally from Roman remains found i
the neighbourhood, but is now considere
so sacred that no Christian is allowed
set foot within its precincts; all that w
know is that it is a worthy compeer of th
contemporary mosques of Damascus an
Cairo, while owing to its secluded statio
it may probably be less altered than eith
of these great buildings, and may cons
quently convey a more correct idea of th
architecture of that age than can be gathere
from the mosques in great cities.



969. Minaret at Tunis. (From Girault de Prangey.)

Tunis possesses some noble edifices, no
so old as this, but still of a good age; bu
except the minaret represented in the an
nexed woodcut (No. 969), none of them
have yet been drawn in such a manne
as to enable us to judge either what the
are or what rank they are entitled to a
works of art. This minaret is one of th
finest specimens of a particular class. I
possesses none of the grace or elaborat
beauty of detail of those at Cairo; but th
beautiful proportion of the shaft, and th
appropriate half-military style of its ornaments, render it singularly
pleasing. The upper part also is well proportioned, though altered
to some extent in modern times. Unfortunately neither its age nor
height is correctly known. It is probably three or four centuries
old, and with its contemporary the Hassanee mosque at Cairo, proves
that the Saracenic architects were capable of expressing simple
grandeur as well as elaborate beauty when it suited them to
do so.

Algeria possesses no buildings of any importance belonging to any good age of Moorish art. Those of Constantine are the only ones which have yet been illustrated in an intelligible manner, and they scarcely deserve mention after the great buildings in Egypt and the farther East. I cannot help suspecting that some remains of a better age may still be brought to light; but the French archæologists seem to be wholly taken up with the vestiges of the Romans, and not to have turned their attention seriously to the more modern style, which it is to be hoped they soon will do. In an artistic point of view, at least, it is far more important than the few fragments of Roman buildings still left in that remote province.

CHAPTER III.

SPAIN.

CONTENTS.

Introductory remarks — Mosque at Cordoba — Palace at Zahra — Churches of S Maria and Cristo de la Luz at Toledo — Giralda at Seville — Palace of t Alcazar — The Alhambra — Sicily.

CHRONOLOGY.

	DATES.		DA
Moors invade Spain	A.D. 711	Alcazar and Giralda at Seville (about) .	A.D. 1
Abd el-Rahman commences Mosque at Cordoba	786	Mohammed ben Alhammar commences Alhambra	1
El Mansour enlarges Mosque at Cordoba .	876	Abou abd Allah, builder of Court of Lions begins to reign	1
Caliph Hakeem rebuilds sanctuary at Cordoba	965	Christian conquest of Granada	1

FOR the present it is feared we must forego any attempt to trace t steps by which the Saracenic styles reached Spain, or to determi why the forms it assumed when we first meet it there are so differe from those we find elsewhere. As a style it is inferior to many oth forms of Saracenic art. It has not the purity of form and elegan of detail attained in Egypt, nor the perfection in colouring whic characterises the style of Persia, while it is certainly inferior both i elegance and richness to that of India. Still it is to us perhaps t most interesting of the whole, not only because of its proximity our own shores, and our consequent greater familiarity with it, b because history, poetry, and painting have all combined to heighte its merits and fix its forms on our minds. Few are unacquainte with the brilliant daring of the handful of adventurers who in th 8th century subjugated Spain and nearly conquered Europe, an fewer still have listened without emotion to the sad tale of thei expulsion eight centuries afterwards. Much of the poetry an romance of the Middle Ages owes its existence to the struggle between the Christian and the Paynim knights; and in modern time poets, painters, and architects have all lingered and expatiated on th beauties of the Alhambra, or dwelt in delight on the mysteriou magnificence of the mosque at Cordoba. Indeed no greater compli ment could be paid to this style than that conveyed by the fact that till within the last few years, not one work of any importance has bee devoted to the Christian antiquities of Spain, while even Englan has produced two such splendid illustrations of the Alhambra as those of Murphy and Owen Jones—works far more magnificent than any devoted to our own national arts. In France, too, Girault de Prangey, Le Normand, Chapuy, and others, have devoted themselves to the task; and even in Spain the 'Antigüedades Arabes en España' is the best production of the class. We are thus really familiar with what these strangers did; while the cathedrals of Seville, Toledo, Burgos, and Leon, are only partially measured or illustrated; and travellers hurrying to the Alhambra scarce condescend to alight from the diligence to cast a passing glance at their beauties.[1]

This is indeed hardly fair; still it must be confessed it is impossible to come into contact with the brilliant productions of the fervid imagination of a Southern people without being captivated with their beauty; and there is a fascination in their exuberance of ornament and brilliancy of colour which it is impossible to resist when these are used with the daring which characterises their employment here. It is also true that these Moorish architects avoid the vulgarity which would inevitably accompany such exuberance in the hands of Northern artists—a defect which the more delicately organised Asiatic invariably escaped.

CORDOBA.

As far as the history of architecture is concerned, by far the most interesting building in Spain is the mosque of Cordoba; it was the first important building commenced by the Moors, and was enlarged and ornamented by successive rulers, so that it contains specimens of all the styles current in Spain from the earliest times till the building of the Alhambra, which was in the latest age of Moorish art.

This celebrated mosque was commenced by Caliph Abd el-Rahman in the year 786, and completed by his son Hesham, who died 796. The part built by them was the eleven western aisles, which then formed an edifice complete in itself, not unlike the Aksah at Jerusalem (except in the number of aisles), which the Caliph is said to have been anxious to surpass. It is by no means clear whether it originally had a court in front, but it is certain that the present court owes its existence to another Caliph, of the same name as t founder, in the year 957. As, however, the Christian basilicas of th age had almost always courts in front, it is more than probable th

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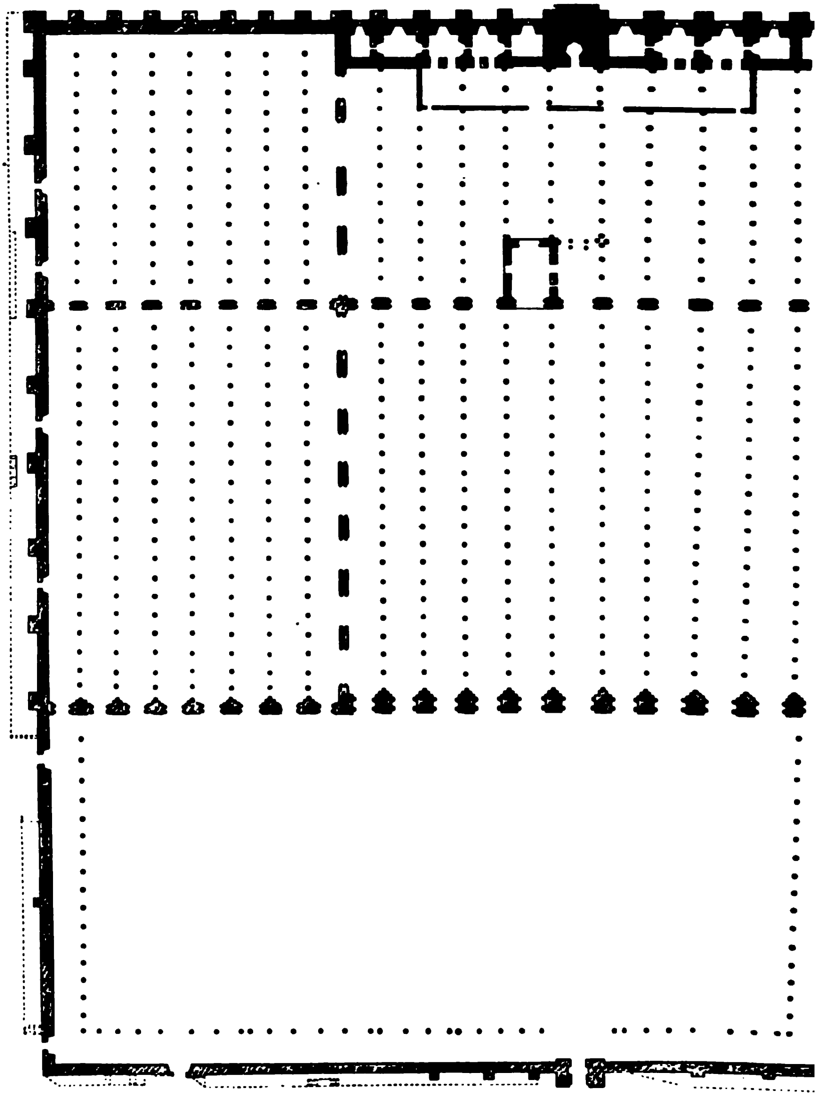
[1] When the great national work, entitled 'Monumentos Architectonicos d'España,' is complete, this reproach will be removed, but that certainly will not be the case for ten or twelve years to come, if it ever does attain completion. The scale is too large, and the total want of principle on which it is carried out renders it useless till it is further advanced. Twenty-three numbers are published, but not one important building is complete, and, excepting a plan of Toledo, not one of the larger buildings is even attempted—Cosas d'España.

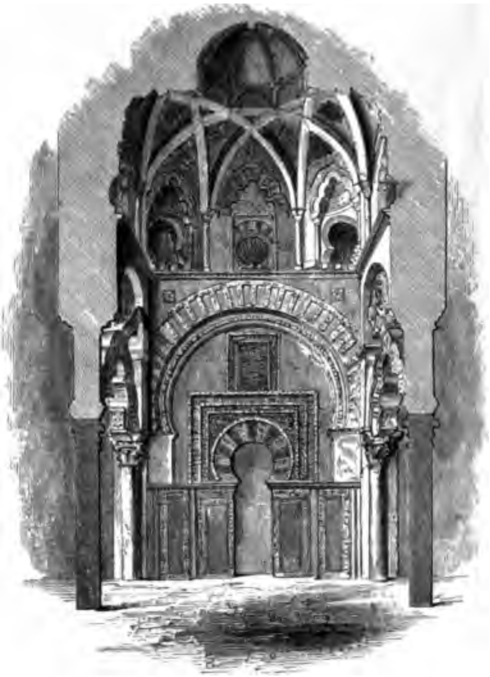
The above note was written ten years ago and is true now, except that the twenty-three must be now thirty-two, where it stopped six or seven years ago.



970. Mosque at Cordoba. (From a Plan by G. le Normand.) Scale 100 ft. to 1 in.

this mosque had one also; for the Mahomedan mosques erected in countries previously Christian, borrow much of their arrangement from these edifices.

The eight eastern aisles were added by El Mansour (976–1001), thus completing the mosque to a parallelogram of 420 ft. by 375;[1] it covers therefore, 157,500 square feet, being a larger superficies than that of any Christian church except St. Peter's at Rome. It is, however, sadly deficient in height, being only about 30 ft. high to the roofs, and also wants subordination of parts, all the aisles being nearly of the same width, about 22 ft., except the central one of the original eleven, which is 5 ft. wider; the 33 transverse aisles are all similar in breadth; so that altogether it is as deficient in design as the "hall of a thousand columns" of a Hindu temple, and produces pretty nearly the same effect.



971.. Interior of Sanctuary at Cordoba. (From a Drawing by Girault de Prangey.)

So completely has the building been altered by various repairs and the intrusion of a modern cathedral into its centre, that it is difficult to understand many of the original arrangements, especially how it was lighted, for the few doors towards the court and on the sides would not suffice, and there is no appearance of a clerestory in the centre. The original roof, however, which was of wood richly carved and painted, has been removed, and brick vaults substituted. My own impression is that the upper part of the side-walls was originally an open arcade or colonnade on the two sides at least, which is confirmed by the fact that the side-aisles are narrower than the others exactly by the thickness of the walls; so that, if the walls were low, with columns standing on the outer edge, the width of these aisles would be uniform with the rest.

The Sanctuary was rebuilt by the Caliph Hakeem, A.D. 965, and is the most beautiful and elaborate specimen of Moorish architecture in

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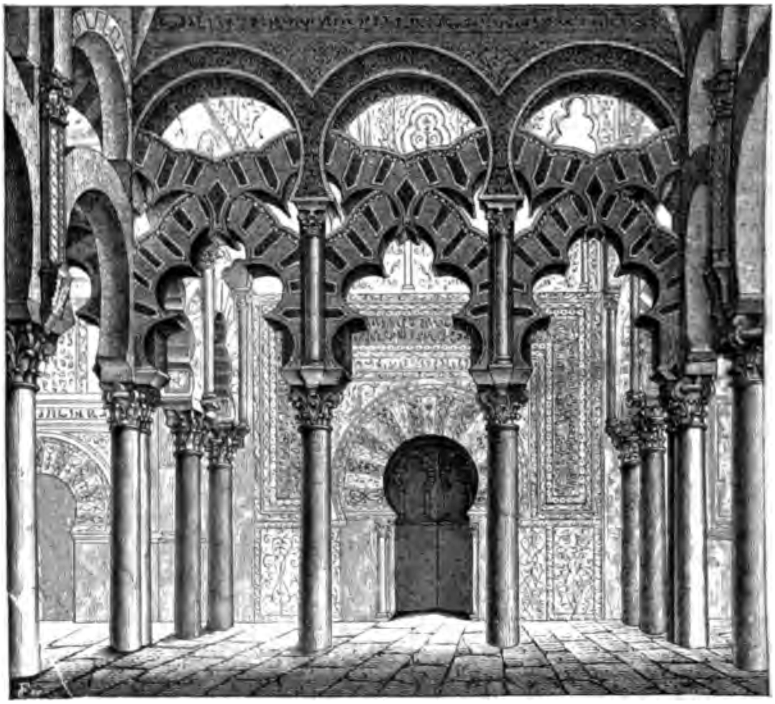
[1] Notwithstanding the number of plans published of this edifice, it is extremely difficult to ascertain its exact dimensions. Murphy, in his text, makes them 623 × 440, whereas the scale of his plans shows 570 × 405. Le Normand's two plans differ considerably from one another. The above is about the mean.

Spain and of the best age. In the great body of the mosque the architects employed columns brought from the ruined Roman cities of Merida and the neighbourhood, probably those supporting the porticos of the Forum and streets, or the courts of private houses. These being small and low, they were obliged to employ the expedient of placing arch over arch to eke out their height—to invent in short for the nonce that strange style which gives so peculiar a character to this building. Before the age of El Hakeem, however, the style had time to perfect itself; it was no longer dependent either on the materials or the forms of Roman art. They obtained also at this time the assistance of workmen from Byzantium, with which Court the Caliphs of Spain were closely allied; and with their own exquisite taste they made the façade and niches of this part of the building the most elaborate and beautiful specimens of the art in Spain, and which but for the smallness of the scale and confined nature of the design, might rival anything else found anywhere.

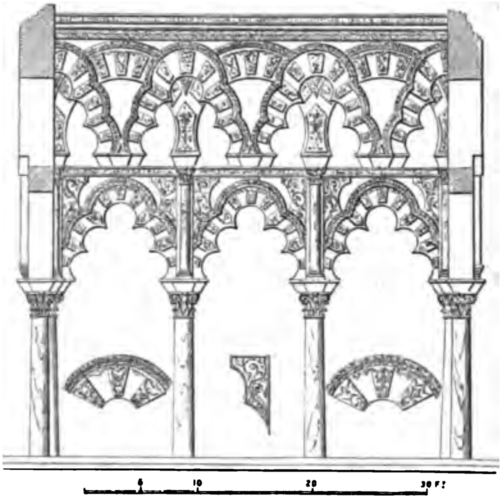


972. Exterior of the Sanctuary, Cordoba. (From Rosengarten.)

The flowing and graceful forms of the design of this Sanctuary are preferable to the interlacing straight lines of the Alhambra, and the materials, which are in this place white and coloured marbles and true mosaic work, are very much to be preferred to the paint and plaster of the other and more celebrated edifice.

The ornamentation of the screen of columns in front of the Sanctuary seems to be of a later date than the holy place itself, and to have been remodelled to its present form at a time when the wooden roof was removed and the existing vault substituted. Like every form of architecture which is appropriate and fulfils its purpose, it demands our admiration; but it would be extremely difficult to design forms so ungraceful in themselves, or so clumsily put together as the interlacing arches of the upper part, and the whole is so bizarre that it requires all its richness of detail, and all its associations, to reconcile a stranger to its appearance.

The same system of ornamentation is carried out in the chapel of Villa Viciosa, erected apparently about the year 1200. It is evidently one of those raised platforms so common in Indian, and indeed in all royal mosques, where the king in his grandeur could pray, uncontaminated by the vulgar crowd. Though a good deal altered and deranged by being converted into a Christian chapel, it still shows, in the age of its greatest originality, the germ of that style which was afterwards elaborated at Granada, and is generally considered as the typical style of the country.



973. Screen of the Chapel of Villa Viciosa, Mosque of Cordoba.

Before leaving this mosque it may be as well to remark that nowhere in any of these styles does the pointed arch appear, or only so timidly as to be quite the exception, not the rule. At an age when its employment was universal in the East, it is singular to observe how completely the Saracenic architects followed the traditions of the country in which they found themselves. At Cordoba they never threw off the influence of the Roman arch, though farther north the pointed arch is by no means uncommon in their buildings.

Contemporary with the rebuilding of the sanctuary of the mosque was the erection of the great palace in the city of Zahra near Cordoba, which, if we may trust the accounts that have been handed down us, was by far the most wonderful work of the Moors in Spain. Th indeed might be expected, for, as has been before remarked, the palac were the principal buildings of this people, and this being of the ve best age might naturally be expected to excel any other edifice erect by them.

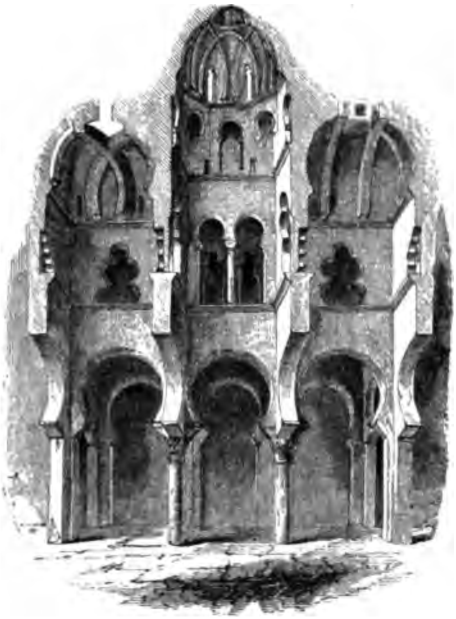
Hardly a stone now remains to mark even the spot where it stoo Its destruction commenced shortly after its completion, in the troubl of the 11th century, even before the city fell into the hands of t Christians, and we therefore depend wholly on the Arabian historia from whom Conde and Murphy compiled their accounts; but they, with Maccary, describe the mosque in the same page with t palace, and do not exaggerate, nor say one word too much in prai of the former, we cannot refuse credence to their description of t latter.

According to these authors the enclosing wall of the palace w 4000 ft. in length E. and W., and 2200 ft. N. and S. The greater pa of this space was occupied by gardens, but these, with their marb fountains, kiosks, and ornaments of various kinds, must have surpass in beauty, and perhaps even in cost, the more strictly architectur parts of the building. 4300 columns of the most precious marbl supported the roofs of the halls; 1013 of these were brought fro Africa, 19 from Rome, and 140 were presented by the Emperor Constantinople to Abd el-Rahman, the princely founder of th sumptuous edifice. All the halls were paved with marbles in thousand varied patterns. The walls too were of the same precio material, and ornamented with friezes of the most brilliant colour The roofs, constructed of cedar, were ornamented with gilding on a azure ground, with damasked work and interlacing designs. All, i short, that the unbounded wealth of the caliphs of that period coul command was lavished on this favourite retreat, and all that the a of Constantinople and Bagdad could contribute to aid the taste an executive skill of the Spanish Arabs was enlisted to make it the mos perfect work of its age. Did this palace of Zahra now remain to u we could afford to despise the Alhambra and all the works of tha declining age of Moorish art.

Among other buildings contained within the great enclosure o the palace was a mosque. This had five aisles, the central one wide than the others. The total length from the Kibleh, or niche pointin to Mecca, to the opposite wall was 97 cubits (146 ft.), the breadt from E. to W. 49 cubits (74 ft.). It was finished in the year 941 and seems to have been one of the last works of the palace, havin been commenced in 936. From this description it is clear that it wa virtually a five-aisled church, and, as no mention is made of th court, we may fancy that, like the seven-aisled Aksah at Jerusalem it never had that accompaniment, but was in reality only a basilica extended laterally, but on a small scale.

The church of Sta. Maria la Blanca (Woodcuts Nos. 721, 722), described in a previous chapter, though built for another people, and for a different purpose, is still so essentially in the Saracenic style, that it may fairly be taken as illustrating the progress which had been made in perfecting it up to its date in the 12th century.

Another very interesting specimen of a Moorish mosque in Spain is that at Toledo, now known as the church of Cristo de la Luz. It is a small square building with four stout short pillars on the floor, dividing it into nine equal compartments, the central one of which is carried up higher than the others, and terminated by a sort of dome, if dome it can be called; for the Spanish architects, working almost wholly from Roman models, never adopted the Byzantine dome to any extent, except perhaps as the roofs of baths. In their mosques and palaces it is only used as an ornamental detail, and never constructed either of stone or brickwork, but merely a carpentry framing covered with stucco or mastic. The Spanish style shows in this a most essential difference from the Eastern, where the domes are so splendid and durably constructed, and where they constitute the actual roofs of the buildings.



974. Church of San Cristo de la Luz, Toledo. (From a Drawing by Girault de Prangey.)

Indeed vaulting does not seem under any circumstance to have been an art to which the Spanish Arabs ever paid any attention. Almost all their roofs are of wood carved and painted, or of stucco, not used to imitate stone, but as a legitimate mode of ceiling, which it certainly is, and for fanciful and gorgeous decorations perhaps preferable to more durable, but less manageable materials.

The art resulting from such materials is, it is true, more ephemeral and must take a lower grade than that built up of materials that should last for ever; but such was not the aim of the gay and brilliant

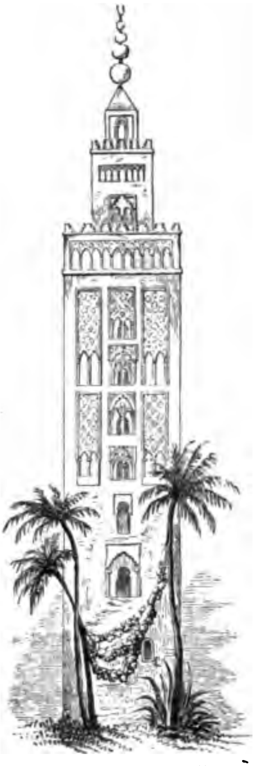
Moors, and we must judge them by their own standard, and by th success in attaining the object they aimed at.

In San Cristo the walls are sufficiently solid and plain, and on t whole the forms and decorations are judiciously and skilfully appl to attain the requisite height without raising the columns or givi any appearance of forced contrivances for that purpose. In t respect it shows a considerable advance on the design of the ol part of the mosque at Cordoba, than which it is probably at leas century more modern; but it does not show that completeness whi the art attained in the 10th century, when the sanctuary at Cord was erected.

These four buildings mark four very distinct stages in the hist of the art—the early mosque at Cordoba being the first, the S Christo de la Luz the second; the third and most perfect is w represented by all the building at the southern end of the mosq at Cordoba; and the fourth by Sta. Maria la Blanca, where all tr of Roman and Byzantine art has wholly disappeared. A fifth sta is represented by another synagogue at Toledo called El Transit but this is so essentially merely a gorgeously ornamented room tl it hardly serves to be classed among monumental buildings; besi which this stage is so well illustrated in the palaces of Seville a Granada that it is not necessary to dwell on minor examples. H the great mosques of Seville, Toledo, or Granada been spared to us, would perhaps have been easier and better to restrict our illustrati to sacred edifices alone; but they—at least certainly the two fi named have wholly disappeared to make way for the splend cathedrals which stand where they once stood, and which ha obliterated nearly every trace of their previous existence. In t northern cities the national pride and stern bigotry of the Spaniar have long ago effaced all traces of this religion.

THE GIRALDA AT SEVILLE.

None of the mosques we have been describing possess minar nor is there anything in Spain to replace the aspiring forms of t East except the Giralda at Seville. This is a more massive tow than is, I believe, to be found anywhere else as the work of a Mosl architect. At the base it is a square of about 45 ft., and rises witho diminution to the height of 185 ft. from the ground; to this a belf was added in 1568 by Ferdinand Riaz, making it 90 ft. higher; a unfortunately we have nothing to enable us to restore with certain the Saracenic termination which must have been displaced to ma room for this addition. In the annexed woodcut (No. 975) it is repr sented as restored by Girault de Prangey, and from a comparis with the towers of Fez and Morocco, erected by the same king, it more than probable it was thus terminated originally. It is difficult nevertheless to reconcile oneself to the idea that the upper part was not something more beautiful and more in accordance with the base. In the East the Mahomedan architects would certainly have done something better; but here, from the want of familiarity with tower-architecture, and from the want of any circular or domical forms for the termination of towers or sky-lines, this inartistic form may have been adopted. The lower part is certainly much more beautiful; the walls are relieved with panels to just such an extent as is required for ornament without interfering with the construction or apparent solidity of the tower, while the windows are graceful and appropriate, and in such number as seems required. In this respect it contrasts pleasingly with the contemporary campanile at Venice, which, though very nearly of the same dimensions, is lean and bald compared with this tower at Seville. So indeed are most of the Italian towers of the same age. All these towers seem to have been erected for very analogous purposes, for the Giralda can never have been meant as the minaret of a mosque, to be used for the call to prayer; nor can we admit the destination sometimes ascribed to it by those who surmise that it may have been merely meant for an observatory.



975. Giralda, Seville. (From a Drawing by Girault de Prangey.)

Most probably it was a pillar of victory, or a tower symbolical of dominion and power, like many others we have had occasion to allude to in the previous pages of this work. Indeed the tradition is that it was built by King Yousouf to celebrate his famous victory of Alarcos, gained in the year 1159, in which year its construction was commenced. As such it is superior to most of those erected in Europe in the Middle Ages, but far inferior, except in size, to the Kootub Minar, and many others still found in various parts of Asia.

THE ALCAZAR AT SEVILLE.

The Alcazar[1] at Seville was an older palace, and perhaps also at one time a more magnificent one than the Alhambra itself. Hence it would be a most interesting example of the Mahomedan style, were it not that it has been much dilapidated in subsequent ages, and its character destroyed by alterations and so-called improvements after it fell into the hands of the Christians. It is more than probable that the best parts of it belong to the same age as the Giralda—the end of the 12th and beginning of the 13th century—and that it continued to receive additions till the city was taken by the Christians in 1248. A careful examination of the building by some one intimate with all the peculiarities of the style might distinguish the ancient parts from the later Christian additions, especially those perpetrated by Don Pedro the Cruel (1353–1364), who, in an inscription on the walls, claims the merit of having rebuilt it. The history of this palace is not consequently of much importance, since it is not so much older than the Alhambra as to mark another style, nor so complete as to enable us to judge of the effect of the art as perfectly as we can in that celebrated palace.

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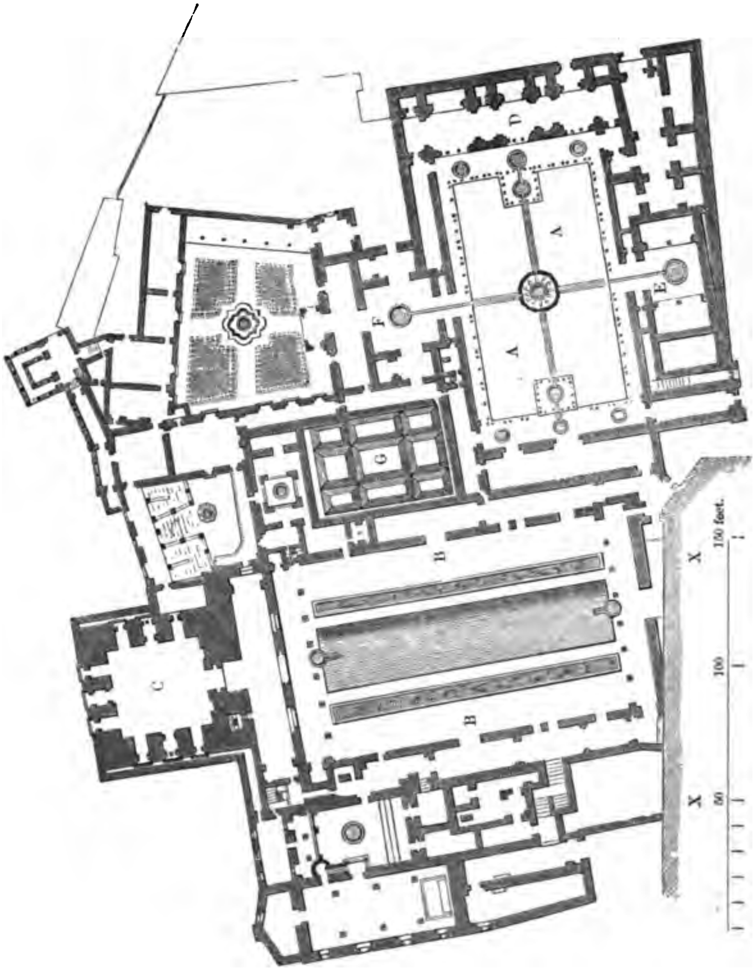
[1] Alcazar = el-Kasr, "the Castle."

THE ALHAMBRA.

It was after his expulsion from Seville (1248) that Mohammed ben Alhamar commenced the present citadel of the Alhambra, at which both he and his successors worked continually till the end of the 13th century. It does not, however, appear that any of the more important buildings now found there were erected by these monarchs. From the accession of Abou-el-Walid (1309) to the death of Yousouf (1354) the works of the present palace seem to have been carried on uninterruptedly, and it is to this half century that we must refer all the essential parts of the palace now found in the citadel.

As will be seen from the annexed plan, it consists principally of two oblong courts; the richest and most beautiful, that of the Lions (A A), running east and west, was built by Abou Abdallah (1325–1333). The other, the Court of the Alberca (B B), at right angles to the former, is plainer and probably earlier. Restorers generally add a third court, corresponding with that of the Lions, which they say was removed to allow of the erection of the palace of Charles V. (X X), which now protrudes its formal mass most unpleasingly among the light and airy constructions of the Moors. My own impression is that, if anything did stand here, it was the Mosque, which we miss, although we know that it existed, and tradition points to this side as its locality, though it certainly was not the apartment at that angle which now goes by that name. It must, like all Spanish mosques, have faced the south, and was most probably destroyed by the first Christian conquerors of Granada. Indeed it is not unlikely that the Christian palace above mentioned, which stands strangely unsymmetrically with the other buildings, follows the lines of the old mosque. This could be in great measure determined if we could rely upon the bearings of the different courts and buildings as given in the plans hitherto published.

The principal entrance to the Alhambra seems always to have been at the southern end of the Court of the Alberca. This part does seem to have been altered or pulled down to make way for the palace of Charles V. The court was originally called, apparently from the pool of water which always occupied its centre, El Birkeh. It is 138 ft. long by 74 wide, the longer sides being singularly, and in such a place ungracefully, plain. The end to the south terminates with a double arcade of very beautiful design; and that to the north with a similar one, but only one storey in height, crowned by the tower enclosing the great Hall of the Ambassadors (c), to which the Court is practically an ante-room. This is an apartment 35 ft.



976. Plan of the Alhambra, Granada. (From G. Le Normand.)

square, and about 60 in height, roofed by a polygonal dome of great beauty of design, and covered, like the walls, with arabesque patterns of the greatest beauty. One of its most charming peculiarities, however, is the deeply recessed windows, looking down on the city, and beyond that commanding a view of the delicious Vega, and the mountains that bound it. It is one of the most beautiful scenes in the world, of which the architect availed himself with the eye of a true artist, who knew how to combine nature and art into a perfect whole.

The other court, called that of the Lions (A A), from the beautiful fountain supported by twelve conventional-looking animals so called, is smaller (115 ft. by 66 from wall to wall), but far more beautiful and elaborate than the other: indeed, with the apartments that surround it, this is the gem of Arabian art in Spain—its most beautiful and most perfect example.[1] It has, however, two defects which take it entirely out of the range of monumental art: the first is its size, which is barely that of a modern parish church and smaller than many ball-rooms; the second its materials, which are only wood covered with stucco. In this respect the Alhambra forms a perfect contrast to such a building as the Hall at Karnac, or any of the greater monumental edifices of the ancient world, and, judged by the same standard, would be found lamentably deficient. But, in fact, no comparison is applicable between objects so totally different. Each is a true representative of the feeling and character of the people by whom it was raised. The Saracenic plaster hall would be totally out of place and contemptible beside the great temple-palace of Thebes; while the granite works of Egypt would be considered monuments of ill-directed labour if placed in the palaces of the gay and luxurious Arab fatalist, to whom the present was everything, and the enjoyment of the passing hour all in all.

The shafts of the pillars that surround the Court of Lions are far from being graceful in themselves, being more like the cast-iron props used by modern engineers than anything else. Their capitals, however, are very gracefully moulded, and of a form admirably adapted for the support of the superstructure they were destined to bear, and the pillars themselves are so gracefully grouped, alternately single and coupled, and their alignment is so completely broken by the projecting portico at each end, that they cease to be prominent objects in themselves, and become mere accessory details. The arcades which they support are moulded in stucco with a richness and beauty of ornament that is unrivalled. There is in this no offence to good taste; indeed work executed in plaster *ought* to be richly decorated, otherwise it is an unsuccessful attempt to imitate the simplicity and power that belongs to more durable and more solid materials. It should therefore always be covered with ornament, and was never elaborated with more taste and consistence than here.

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[1] A perfect copy of this court was reproduced by Mr. Owen Jones at the Crystal Palace in 1854. Except being slightly curtailed in plan, every detail and every dimension is identical with the original.

At the upper end of this court is an oblong hall, called that of Judgment (D), and on either side two smaller rooms, that "of the Abencerrages" (E) on the south, and that called "of the Two Sisters" (F) opposite, the latter being the most varied and elegant apartment of the whole palace. The walls of all these are ornamented with geometric and flowing patterns of very great beauty and richness, and applied with unexceptionable taste for such a decoration; but it is in the roofs and larger arcades that the fatal facility of plaster becomes most apparent. Instead of the simple curves of the dome, the roofs are made up of honeycombed or stalactite patterns, which look more like natural rockwork than the forms of an art, which should be always more or less formal and comprehensible at a glance, at least in its greater lines and divisions. There is perhaps no instance where a Saracenic architect has so nearly approached the limits of good taste as in these parts, and it requires all the countervailing elements of situation, and comparison with other objects, to redeem them from the charge of having exceeded those limits.

Behind the Hall of the Two Sisters, and on a lower level, are situated the baths (G)—beautiful in some respects, and appropriately adorned, but scarcely worthy of such a palace.

Besides the edifices mentioned above, there is scarcely a town in Spain, once occupied by the Moors, that does not retain some traces of their art. These traces, however, are generally found in the remains of baths, which from their nature were more solidly built than other edifices, and were generally vaulted with bricks—frequently with octagonal domes supported on twelve pillars, as those in the East. These in consequence have survived, while the frailer palaces of the same builders have yielded to the influence of time, and their mosques have disappeared before the ruthless bigotry of their successors. None of the baths, however, seem to be of sufficient importance to require notice.

In Spain we entirely miss the tombs which form so remarkable a feature of Saracenic architecture wherever any Turanian blood flows in the veins of the people. The Moors of Spain seem to have been of purely Semitic race, either importations from Arabia or the descendants of the old Phœnician settlers on the southern coast; and among them, of course, it would be absurd to look for any indications of sepulchral magnificence.

If the Moors of Spain had practised tomb-building to as great an extent as some of their brethren further east, this circumstance would, in all probability, have given a more monumental character to their style of architecture. True domes would certainly have been introduced and applied, not only to their mosques but to their palaces, and with them all those beautiful arrangements which we find as the invariable accompaniments of domes in the East.

Be this as it may, it is on the whole perhaps fortunate that we possess in Spain a form of Saracenic art from which all feeling of solemnity, and all aspirations for the future, are wholly banished. No style of architecture is so essentially impressed with the feeling that the enjoyment of the hour is all that should be cared for. It is consequently the gayest, but it is also the most ephemeral, of all the styles of architecture with which we are acquainted.[1]

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[1] Nothing need be said here of La Cuba and La Ziza, and other buildings in Sicily, which, though usually ascribed to the Moors, are now ascertained to have been built by the Normans after their conquest of the island in the 11th century. They are Moorish in style, it is true, and were probably erected by Moorish artists, but so were many churches and chapels in Spain, as mentioned above; and I am not aware of any building now extant there which can be safely ascribed to the time when the island was held by the Moslems, or was then erected by them for their own purposes. Till that is ascertained, Sicily of course does not come within the part of our subject which we are now considering.

CHAPTER IV.

TURKEY.

CONTENTS.

Mosques of Mahomet II.—Suleimanie and Ahmedjie Mosques—Mosques of Sultanas Validé, and of Osman III.—Civil and Domestic Architecture, Fountains, &c.

CHRONOLOGY.

	DATES.		DATES.
Conquest of Constantinople by Mahomet II.	A.D. 1443	Mahomet III.	A.D. 1595
Bajazet II.	1481	Ahmed I.	1603
Selim I.	1512	Amurath IV	1623
Suleiman II., the Magnificent	1520	Mahomet IV	1649
Selim II.	1566	Suleiman III.	1687
Amurath III.	1574	Ahmed III.	1703
		Mahmood I.	1739

THE latter half of the 15th century witnessed some strange vicissitudes in the fate of the Mahomedan faith in Europe. In 1492 Granada was conquered, and the Moors expelled from the country which they had so long adorned by their arts, and rendered illustrious by their cultivation of the sciences. Of all the races who, at various times, have adopted the faith of Islam, the Spanish Moors seem to have been among the most enlightened and industrious, and the most capable of retaining permanently the civilisation they had acquired. They have made way for a people less progressive and more bigoted than any other population in Europe.

Before, however, this misfortune happened in the West, the fairest city of the Christian world, and its most fertile provinces, had fallen a prey to the most barbarous horde of all those who had adopted the Mahomedan religion. For two centuries the Turks had gradually been progressing westward from their original seats in Central Asia, and at last, in 1453, Constantinople itself fell into their power, and for more than a century after this, the fate of Europe trembled in the balance. The failure of the siege of Vienna (1683) turned the tide. Since that time the Christians have slowly and surely been recovering their lost ground; but the Crescent still surmounts the dome of Sta. Sophia.

Had the Turks obtained possession of Constantinople at an earlier date, it is possible that their architecture might have taken a different form from that in which we now find it. But before that event the foundation of St. Peter's at Rome had already been laid. The old principles of art were already losing their hold on the architects of Europe, a revolution was taking place, and though this would hardly be much felt so far east as the Bosphorus, or materially influence strangers like the Turks, still it must have had some influence, and modified their style to some extent. Be this as it may, we are struck at Constantinople with the same phenomenon which meets us everywhere in the Mahomedan world. Wherever the various nationalities settled who had embraced that faith, they at once adopted the architectural forms of their new country, and set to work to mould and modify them, so as to bring them more into conformity with their special requirements. Nowhere do they seem to have brought their style with them, or thought of forcing that on their new subjects. In this they were wise; and it is what probably all nations would do who had any true knowledge of art, or any true feeling for its purposes. In nine cases out of ten the original people of a country find out the arrangements most suited to their climate, and the forms of construction best adapted to the materials which are available; and to attempt to substitute for these forms suited to other climates and another class of materials, is what only an Aryan would think of doing. The Turks, though barbarous, belonged to one of the great building races of the world; and so soon as they entered Constantinople, set to work vigorously to vindicate the characteristics of the family.

Besides appropriating seven or eight of the principal churches of the city with Sta. Sophia at the head of the list—to the new worship, Mahomet II. founded six or seven new mosques, some of them of great magnificence. The chief of these is that which still bears his name, and crowns the highest of the seven hills on which the city stands. To make way for it, he pulled down the Church of the Apostles, which had been the burying-place of the Christian emperors apparently since the time of Constantine, and was consequently an edifice of considerable magnificence. It had, however, been plundered by the Latin barbarians who sacked the city some time before the Moslems, and it was also so crippled by earthquakes as to be in a dangerous state. In order to effect his purpose, Mahomet employed Christodulos, a Christian resident in Constantinople, to erect on the spot a mosque, which he intended should surpass all others in his empire. How far he was successful we have now little means of judging. An earthquake in 1763 so completely ruined this mosque that the repairs amounted almost to a rebuilding; and as these were carried out with the quasi-Italian details of the latter half of the 18th century, its present appearance probably conveys very little idea either of the form or of the magnificence of the original building. Enough of its form, however, still remains to tell us that, like all Turkish mosques, it was a copy of Sta. Sophia. There is, indeed, nothing in the style we are now speaking of so remarkable as the admiration which that great creation of the Christians excited in the minds of its Moslem possessors. There are in or about Constantinople at least 100 mosques erected in the four centuries during which the Turks have possessed that city. Not one of these is a pillared court, like those of Egypt or Syria, nor an arcaded square, like those of Persia or India—none are even extended basilicas, like those of Barbary or Spain. All are copies, more or less modified, of Sta. Sophia; and many of the modifications are no doubt improvements; but none are erected with the same dimensions, none possess the same wonderful richness of decoration, or approach the poetry of design, of their prototype. In all that constitutes greatness in architectural art, the Christian Church still stands unrivalled. No one who has stood beneath the dome of Sta. Sophia will hesitate to admit that the Turks were perfectly justified in their admiration of Justinian's great creation; but the curious thing is, that no Christian ever appreciated its beauties. When, after the troubles of the 7th and 8th centuries, the Greeks again took to building churches, it was such as Sta. Irene, or the Theotokos, churches like those at Pitzounda or Ani, or those of Greece or Mount Athos. Not one single direct copy of Sta. Sophia by Christian hands exists, so far as is known, in the whole world. But the Turk saw and seized its beauties at a glance; and, by constancy to his first affection, saved his architecture from the utter feebleness which has characterized that of Western Europe during the four centuries in which he has been encamped on this side of the Bosphorus.

Among the other mosques built by Mahomet II., the most sacred is that of Eyub, the standard-bearer of the Prophet, whose body is said to have been found on the site of the mosque. Plans and drawings of this mosque might easily have been obtained while our armies occupied Constantinople during the Crimean war; but the opportunity was neglected, and all we have to depend upon is an eye-sketch by Aly Bey.[1] As the mosque in which each Sultan on his accession is girt with the sacred sword, and as the most holy in the empire, it would be interesting to know more about it, but we must wait.

The mosque of Bayazid, 1497-1505, is of the usual type, but not characterized by any extraordinary magnificence. That of Selim I., 1520-1526, has the character of possessing the largest dome of any mosque in the city. I am not aware that it was ever measured, and it does not leave that impression on the eye; but the building is remarkable for the simplicity of its design, and the general propriety of its proportions.

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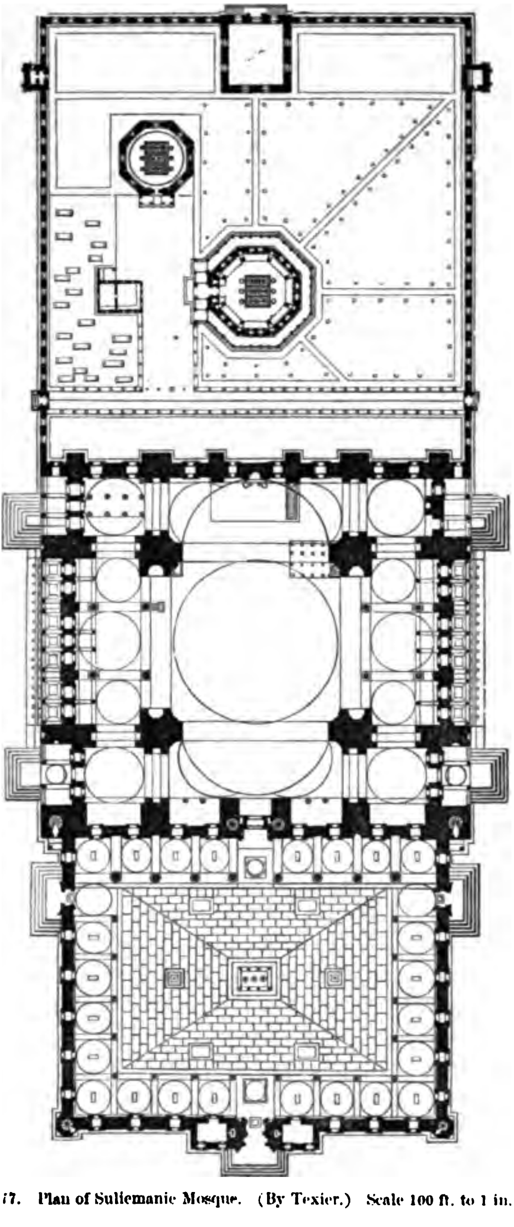
[1] Plate lxxxii.

SULEIMANIE.

All these were, however, surpassed by that which was erected by Suleiman the Magnificent, between the years 1550–1555. It is still quite perfect in all its constructive parts, and little altered in detail; and as there is every reason to suppose that it equalled, or even surpassed, all others of its class, if it be illustrated the rest will be easily understood.



977. Plan of Suliemanie Mosque. (By Texier.) Scale 100 ft. to 1 in.

As will be seen from the plan,[1] the mosque itself is nearly square, 225 ft. by 205 over all externally, and covering between 45,000 and 46,000 sq. ft. In front is a forecourt, 150 ft. by 190 internally, surrounded by an arcade on all sides, and containing the fountains, which are the indispensable accompaniment of all mosques. Behind is the "garden" containing the tomb of the founder and those of his favourite wife and other members of the family. All this, properly speaking, is one design and one

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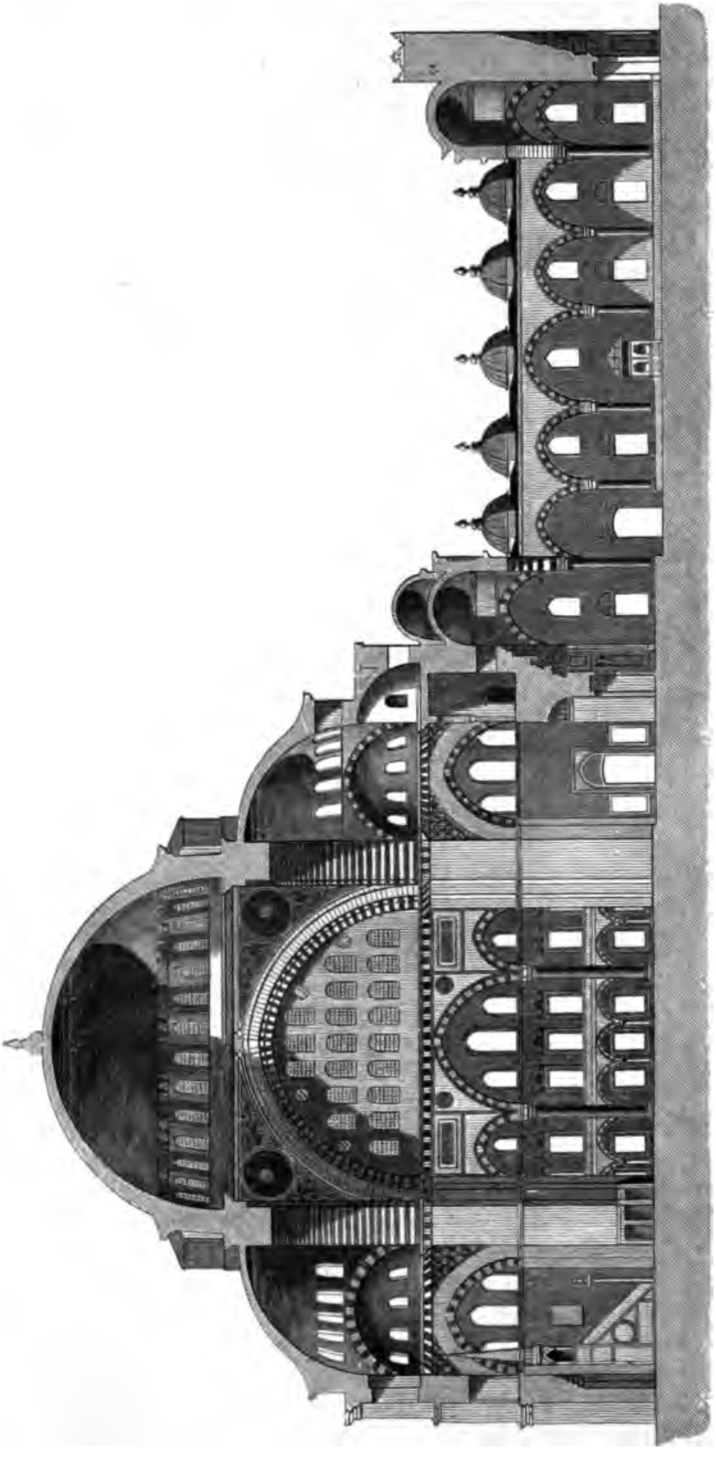
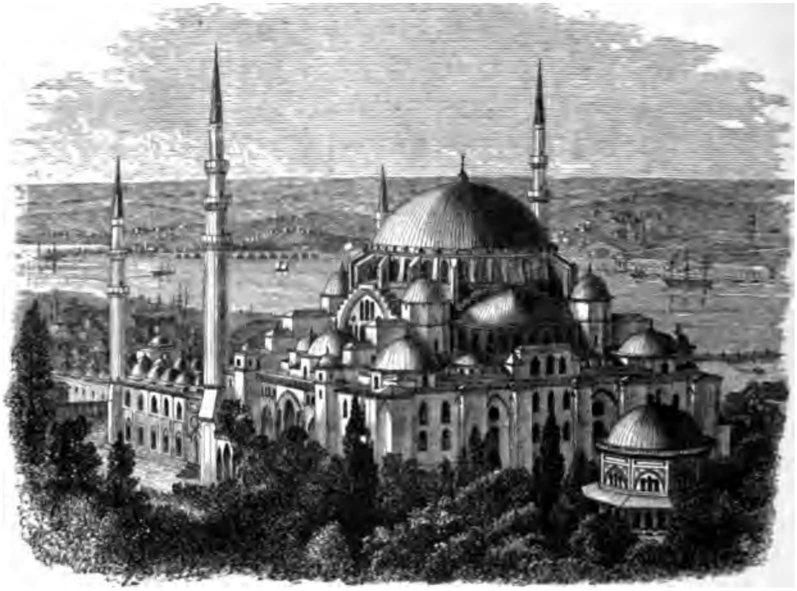
[1] For the plan and section of this mosque I was indebted to the kindness of my friend, the late M. C. Texier, who placed his MS. plans at my disposal for the purpose of being engraved for this work.



978. Section of Suleimanie Mosque. (By Texier.) Scale 50 ft. to 1 in.

building; and all these parts are requisite to complete the establishment of a great Imperial mosque,

Internally the construction rests on four great piers of pleasing and appropriate design; and the screen of windows on each side, under the great lateral arches of the dome, is borne by four monolithic shafts of porphyry of great beauty. These formerly supported statues in the hippodrome, and most probably were brought originally from Egypt. Each is 28 ft. in height, or, with the base and capital, 35 ft. The dome itself is 86 ft. in diameter internally, and 156 ft. in height. This seems even a better proportion of height to diameter than that of Sta. Sophia, though the dimensions are so much less that it has not, of course, the same grandeur of effect. At Sta. Sophia the dome is 108 ft. in diameter, and 175 ft. in height, or 21 and 19 ft. more respectively. These smaller dimensions, as well as the absence in the mosque of all the mosaic magnificence of the church, and the presence of a good deal of modern vulgarity, renders it extremely difficult to institute any fair comparison between the two buildings. On the whole, it may, perhaps, be said with truth, that the mosque is more perfect mechanically than the church, that the constructive parts are better disposed and better proportioned; but, that for artistic effect and poetry of design, the church still far surpasses its rival, in so far at least as the interior is concerned.



979. View of Suleimanie Mosque. (From a Photograph by Bedford.)

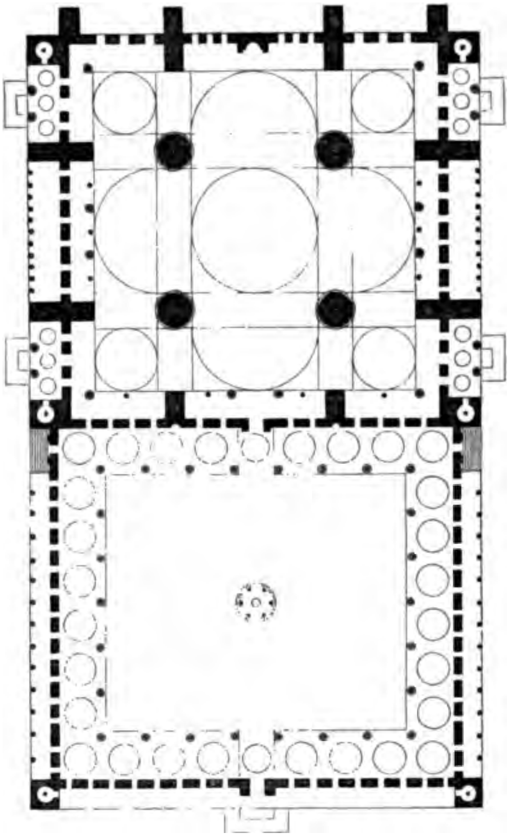
Externally the mosque suffers, like all the buildings of the capital, from the badness of the materials with which it is constructed. Its walls are covered with stucco, its dome with lead, and all the sloping abutments of the dome, though built with masonry, have also to be protected by a metal covering. This, no doubt, detracts from the effect; but still the whole is so massive—every window, every dome, every projection, is so truthful, and tells so exactly the purpose for which it was placed where we find it, that the general result is most satisfactory, and as impressive an external effect has been produced with one-half the expense of adornment requisite for a Gothic building of the same pretensions.

The tomb of the founder, which stands in the garden behind, avoids these defects. It is built in marble of various colours, and every detail is most carefully elaborated. It is too small—only 46 ft. in diameter externally—to produce any grandeur of effect; but it suffices to show that the architects of those days were quite competent to produce satisfactory designs for the exteriors of their buildings, if they had found appropriate materials in which to execute them.

Next in importance to the Suliemanie, among the Imperial mosques of Constantinople, is that which the Sultan Ahmed commenced A.D. 1608. The mosque itself is in plan somewhat larger than the preceding, measuring 235 ft. by 210, and covering nearly 50,000 sq. ft.; but it is inferior both in design and in the richness or taste of its decorations. As will be seen from the plan (Woodcut No. 980), it deviates still further than the Suleimanie from the design of Sta. Sophia; and in the exact ratio in which it diverges from that type, does it fail in producing an artistic effect. Its great defect is, that it is too mechanically regular. In the nave of Sta. Sophia the proportion of length to breadth is practically as two-and-a-half to one. In the Suleimanie it is nearly two to one, but the Ahmedjie is absolutely square. Without asking for the extreme difference between length and breadth which prevails in Gothic cathedrals, a design must have sides—there must be some point towards which the effect tends. In this mosque, as in the Pantheon at Rome, if the plan were divided into quarters, each of the four quadrants would be found to be identical, and the effect is consequently painfully mechanical and prosaic. The design of each wall is also nearly the same; they have the same number of windows spaced in the same manner, and the side of the Kibleh is scarcely more richly decorated than the others. Add to this, that all the windows are glazed with white glass, and that, above the marble wainscotting, whitewash has been unsparingly employed, and it will be easy to understand how the mosque fails in producing the effect which might fairly be expected from its dimensions and the general features of its design. Still, a hall nearly

200 ft. square, with a stone roof supported by only four great fluted piers, is a grand and imposing object, and has very narrowly missed producing the effect its builders were aiming at.

The external effect is more pleasing than the internal; the mode in which the smaller domes and semi-domes lead up to the centre produces a pyramidal effect that gives a very pleasing air of stability to the outline, and the six tall minarets go far to relieve what otherwise might be monotonous. It is said that this is the only mosque in the Moslem world which has so many of these graceful adjuncts, except the mosque at Mecca, which has seven. The Suleimanie and Sta. Sophia have four; most of the others two, and some only one; but, whatever their number, the form of all is nearly identical with those of the Suleimanie (Woodcut No. 979). They are graceful, no doubt, but infinitely inferior to those of Cairo, or, indeed, of any country where this form of tower was long employed. We do not know whence the Turks first got this form, and it is very difficult to understand why they persevered so long in adhering to it, after so many other more beautiful forms had been introduced among their co-religionists in other countries. But so it is; and everywhere its tall extinguisher roof is one of the first objects that warns the traveller that he has passed within the boundaries of the Turkish Empire.



980. Plan of Ahmedjie Mosque. (By Texier.) Scale 100 ft. to 1 in.

Though very much smaller than those just described, that known as the Prince's Mosque is one of the most pleasing in Constantinople.

It was erected in 1548, by order of Sultan Suleiman, by the same architect—Sinan—who designed the great mosque, and who seems to have been the great architect of the reign of that magnificent monarch. The smaller mosque was erected in memory of his son Mahomet, and as a place of burial for him; and another of his sons—Mustafa—was also laid by his side. In accordance with this destination, this mosque bore a more solemn and gloomier aspect than the great mosques of the city. Their principal defect is the glare introduced through their numerous scattered windows, a defect which in this mosque is remedied with the most satisfactory results.

There are three imperial mosques in the city erected by Sultanas, and all bearing the name of Validé, which has given rise to some confusion in describing them. The most important of them is that at the end of the bridge of boats near the härbour, known as the "Mosque at the Garden Gates." It is somewhat late in date (1665), and has been a good deal whitewashed and otherwise disfigured; but on the whole it is of more artistic design than that of Ahmed, and, when fresh, must have been, for its size, as pleasing as any of the mosques in the city.

The Turks adhered so long to this form, and repeated it over and over again with so little variation that it is extremely difficult to draw a line between what may be said to belong to the Middle Ages, and what to modern times. As late, for instance, as 1755 the Sultan Osman III. erected a mosque in the Bazaar, which, externally, is as pleasing as any of those in the city, and it requires a very keen eye to detect anything which would indicate that it is more modern than those of the age of Suleiman. It has this peculiarity, however, that there are no semi-domes, and the light is introduced through screens under all the four great arches of the central dome. In another locality the effect might be pleasing, but in the latitude of Constantinople the result is a glare of light which aggravates the usual defect of these designs. Even the Turks seem to feel this, as the mosque is generally known by the name of Nur Osmanlie, or Lantern of Osman, a designation which too correctly describes its leading characteristics.

Civil and Domestic Architecture.

As about one-tenth part of Constantinople is burnt down every year, and the flames visit each quarter in tolerably regular succession, it would be in vain to look for anything worthy of the name of architecture among the temporary wooden structures dignified by the name of the "palaces" of the nobles. Partly from the jealousy of the Government, or partly, it may be, because the Turks have never felt quite secure in their European possessions, they never seem to have affected anything of a permanent character in their dwellings.

It might, however, be expected that in the palace of the Sultan something better would be found; but there are few things more disappointing than a visit to the Seraglio. In situation it is unrivalled, and it has been the habitation of powerful and luxurious sovereigns for more than fifteen centuries, yet it contains nothing that is worthy of admiration, and hardly anything that is even interesting from its associations. There is nothing within the inclosure which will stand comparison even with the plaster glories of the Alhambra; and the contemporary palaces of Persia, or of Delhi and Agra, surpass it to such an extent as to render comparison impossible.

There is one pavilion, the walls of which are covered with Persian tiles, which is pleasing, both from its form and the mode of decoration. Besides this, the various halls being each separate buildings and grouped without formality together, the effect of the whole is picturesque, though neither as parts nor as a whole have they any architectural merit.

Among the minor objects of architectural art none are more pleasing than the fountains which frequently adorn the public places in the provincial cities as well as in the capital; though their outline is by no means remarkable for beauty. They are generally a square block with a niche on each face, from a spout in which the water flows. The whole is crowned by a very deep cornice constructed in wood, but without any brackets or apparent means of support, which true architectural taste so inevitably demands. Their beauty, in consequence, depends almost wholly on their ornamentation. That, however, is of the most elaborate character, and not only pleasing in form, but rich in colour; of the same character, in fact, as that of the Alhambra, and pleasing from the same cause, in spite of defects in form.

It is probable that if the country towns, especially on the Asiatic side of the Bosphorus, were examined with care, examples might be found of domestic architecture exhibiting more care, and of a more permanent character than any in the capital. The true Turk evidently loves art, and has an instinctive appreciation of the harmonies of colour— probably, also, of form, and if allowed an opportunity, would have produced much that is beautiful in architecture. The blood of the various races who inhabit the capital must, however, be very much mixed, and various other circumstances militate against any great development in that quarter. The subject seems worthy of more investigation than has hitherto been bestowed upon it, but the first appearance of the Turks among civilized nations was only as warriors pushing forward and fighting. When at last they settled on the shores of the Bosphorus it was at an age too late for much true architectural development in Europe. On the whole, we ought therefore rather to be surprised that they did so much, than seek to know why they did not accomplish more. Sinan and Michel Angelo were employed simultaneously in erecting the two great religious edifices of their age in the two old capitals of the Christian world. The mosque at Constantinople is less than one-fourth the size of St. Peter's at Rome, but notwithstanding its comparatively small dimensions, it is far better in design and a much more impressive building than its gigantic Christian rival. If the mosque had been constructed with better materials, and with somewhat increased dimensions, it would have stood a comparison with any building of its class; and even as it is, must be considered as one of the most successful designs of modern times.

CHAPTER V.

PERSIA.

CONTENTS.

Historical notice — **Imaret at Erzeroum — Mosque at Tabreez — Tomb at Sultanieh — Bazaar at Ispahan — College of Husein Shah — Palaces and other buildings — Turkestan.**

CHRONOLOGY.

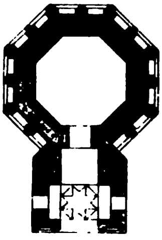
	DATES.		DATES.
Arab conquest of Persia	A.D. 641	Mahomed Khodabendah, builder of tomb at Sultanieh, began to reign	A.D. 1303
Haroun al-Rashid began to reign	786	Sufi dynasty	1499
Dynasty of Tartar Samanides	874	Abbas the Great, builder of Bazaar at Ispahan	1585
Seljukian dynasty	1037	Husein Shah, last of the Sufis	1694
Ghengis Khan	1205	Timarlame	1361–1405
Ghazan Khan builds a mosque at Tabreez	1294		

OWING to a curious concatenation of circumstances, partly local partly ethnological, the architectural history of Persia is nearly a blank for the first six centuries of the Hejira. Nothing remains of the ancient glories of Bagdad except a few fragments of the walls of the Madrissa, and perhaps one or two tombs. Bussorah and Kufa are equally destitute of any architectural remains of the great age of the Caliphs. Indeed, there seems scarcely to be one single mosque or important building now remaining between the Euphrates and the Indus which belongs authentically to the earlier centuries of the Mahomedan era, and in such a state as would enable us to say what the style of those days was, or how far it resembled or differed from the contemporary styles in the neighbouring countries.

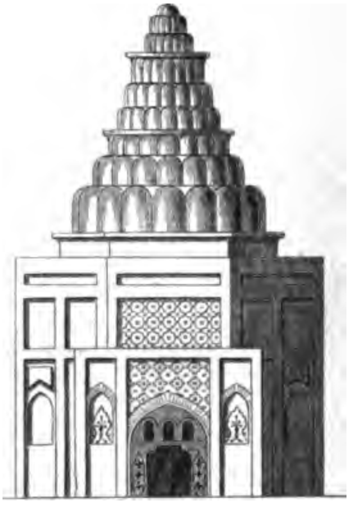
From what we know from history of the age of Haroun al-Rashid, it is probable that no Moorish court ever reached a higher pitch of enlightenment and magnificence than that of Bagdad during his reign (A.D. 786–809). It was also so far removed from the direct influence of the Byzantine style, that it is probable we should find in his buildings the germ of much which now comes abruptly before us without our being able to trace it back to its origin.

In the whole architectural history of the world there is scarcely so complete a break as this, and scarcely one so much to be lamented, considering how great and how polished the people were whose art is thus lost to us. Let us hope, however, that it is not entirely lost; but that some fragments may yet be recovered by the first who earnestly searches for them. Meanwhile there is one tomb outside the walls of

Bagdad which may belong to this epoch; and even if it should prove to be more modern, is interesting from its presenting us with a new form of pyramidal roof. It is known as the tomb of Zobeidé, the favourite wife of Haroun al-Rashid;[1] but as it stands alone, and we have no earlier buildings from which we can trace it, and no later one of a date sufficiently near to enable us to check any conclusion we might arrive at, we must be content to assume the tradition as correct, till the contrary is proved. It is an octagonal building, 80 ft. in diameter externally and 130 ft. in height, with an entrance porch attached to one side. With such dimensions as these, it would hardly attract remark in the vicinity of an Indian city, but the form of its roof is very peculiar. My own impression is, that it is borrowed from earlier buildings, possibly even of the old Babylonian or Assyrian periods. Its greatest claim on our interest, however, arises from the fact that something very like it is found in India in the earliest Hindu and Jaina temples, for which no reasonable origin has yet been assigned. All recent discoveries seem to point to Assyria as the source of much which is found in the early architecture and mythology of India, and this, among other indications, is well worthy of attention.



981. Plan of Tomb of Zobeidé, Bagdad. Scale 100 ft. to 1 in.



982. Elevation of Tomb of Zobeidé, Bagdad. Scale 50 ft. to 1 in.

The same form occurs again in a building known as the Tomb of Ezekiel, near Bagdad (Woodcut No. 983), the date of which has never been satisfactorily ascertained. It occurs also at Susa, on the so-called tomb of Daniel, and generally seems to be so usual in the age of the Caliphs, and is so peculiar, that it must have long been in use before it could become so generally diffused.

From these, which may belong to the age of the Caliphs, we pass at once to the Seljukians, who seem to have been possessed of stronger building instincts.

One of the earliest buildings of this race of which anything like correct illustrations have been published is the Imaret or Hospital of Oulou Jami, at Erzeroum—an arcade of two storeys, surrounding on three sides a courtyard 90 ft. by 45. It is broken in the centre by what in a Christian church would be called a transept. The woodcut here given (No. 984) shows the general appearance of the arcade, and also the upper part of two minarets which flank the external porch. This porch is ornamented in the richest manner of the style. Opposite to the entrance a long gallery leads to the tomb of the founder, a circular building of very considerable elegance, the roof of which is a hemispherical vault internally, but a straight-sided Armenian conical roof on the outside. These dispositions make the plan of the building so similar to that of a Christian church, that most travellers have considered it as one, mistaking the court for the nave, and the tomb, with the gallery leading to it, for the apse and choir. There can, however, be no doubt but that it was originally built by a Mohamedan, for the purpose of a hospital, or place of rest for pilgrims, during the sway of the Seljukian princes in the 12th and 13th centuries; and that its similarity to a Christian church in plan is accidental, though its details very much resemble those of the churches of Ani and other places in Armenia. This, however, only shows that the inhabitants of the same country did not practise two styles, but arranged the same forms in different manners to suit their various purposes.

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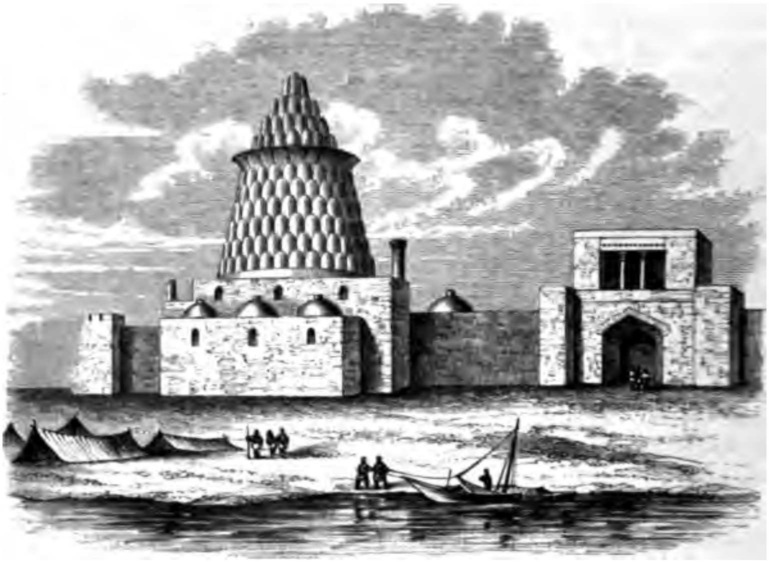
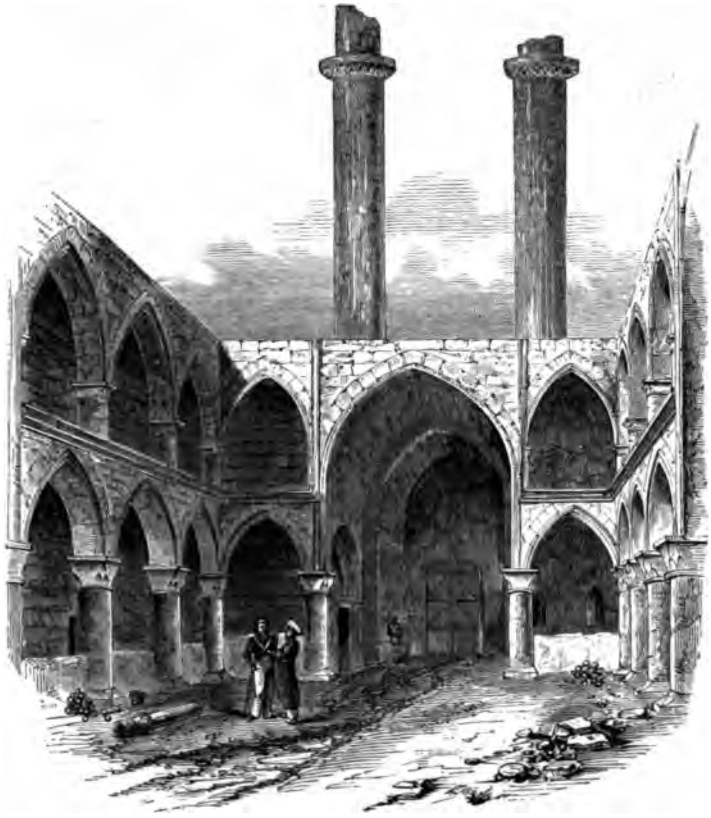
[1] For the plan and elevation of this building I am indebted to the unpublished drawings of the late M. C. Texier.



983. Tomb of Ezekiel, near Bagdad. (From Texier and Pullan.)

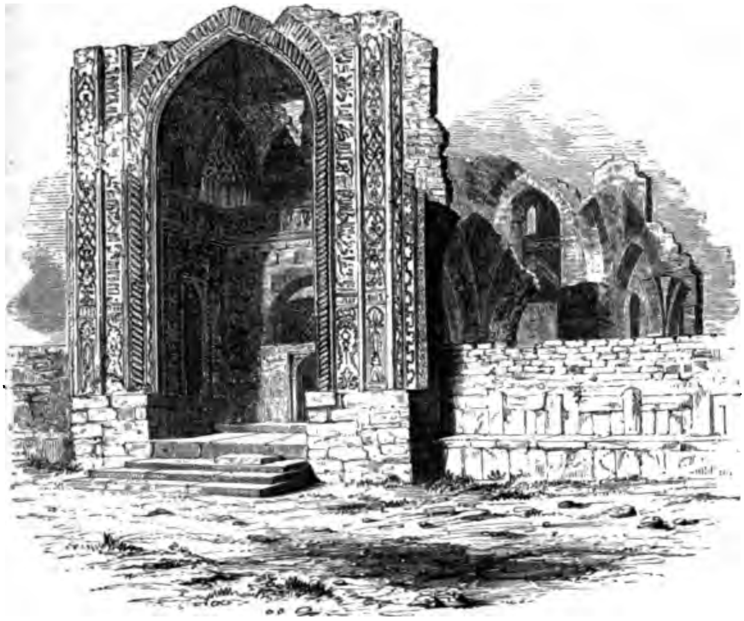
There is another mosque of about the same age as this one at Ani, which would show even more clearly this close analogy; but it has never been drawn with sufficient correctness to admit of its being used for the purpose of demonstrating the fact now pointed out. But, indeed, throughout Armenia, mosques and Christian churches constantly alternate, borrowing details from one another, and making up one of the most curious mixed chapters in the history of the art; a chapter still remaining to be written by some one who may visit the spot with sufficient knowledge and enthusiasm to accomplish it.



984. Imaret of Oulou Jami at Erzeroum. (From Texier's 'Arménie et la Perse.')

Mosque at Tabreez.

The next building that may be chosen for illustration is the ruined mosque at Tabreez, which, when perfect, must have been one of the most beautiful in the country. Its history is not exactly known; but it certainly belongs to the Mogul dynasty, which, on the death of Mangu Khan the son of Ghengis Khan, was founded in Persia by Hulaku, the brother of Mangu. He and his sons generally retained the faith of their forefathers till Ghazan Khan, who succeeded in A.D. 1204. Ghazan zealously embraced the Mahomedan faith, and it their portals. By this means, in some of the French cathedrals, the appearance of a very large portal is obtained with only the requisite and convenient size of opening; but in this they were far surpassed by the architects of the East, whose lofty and deeply recessed portals, built on the same plan as the example here shown, are unrivalled for grandeur and appropriateness.[1]



986. View of Ruined Mosque at Tabreez. (From Texier's 'Arménie et la Perse.')

The mosque was destroyed by an earthquake in the beginning of the present century, but it seems to have been deserted long before that, owing to its having belonged to the Turkish sect of the Sunnites, while the Persians have during the last five centuries been devoted Shi-ites, or followers of the sect of Ali and his martyred sons.

Tomb at Sultanieh. (A.D. 1303-1316.)

Mahomed Khodabendah, the successor of Ghazan Khan, the builder of the mosque at Tabreez last described, founded the city of Sultanieh, and, like a true Tartar, his first care was to build himself a tomb[2] which should become the principal ornament of his new city. Ker Porter[1] says that, being seized with as much zeal for his new Shi-ite faith as his predecessor had been for the Sunnite, his intention was to lodge in this mausoleum the remains of Ali and his son Hossein. This intention, however, was not carried into effect, and we know that his own bones repose alone in their splendid shrine.

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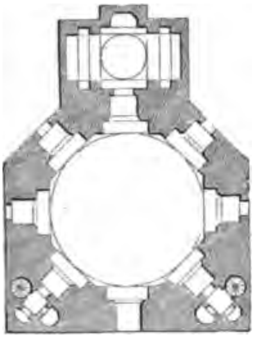
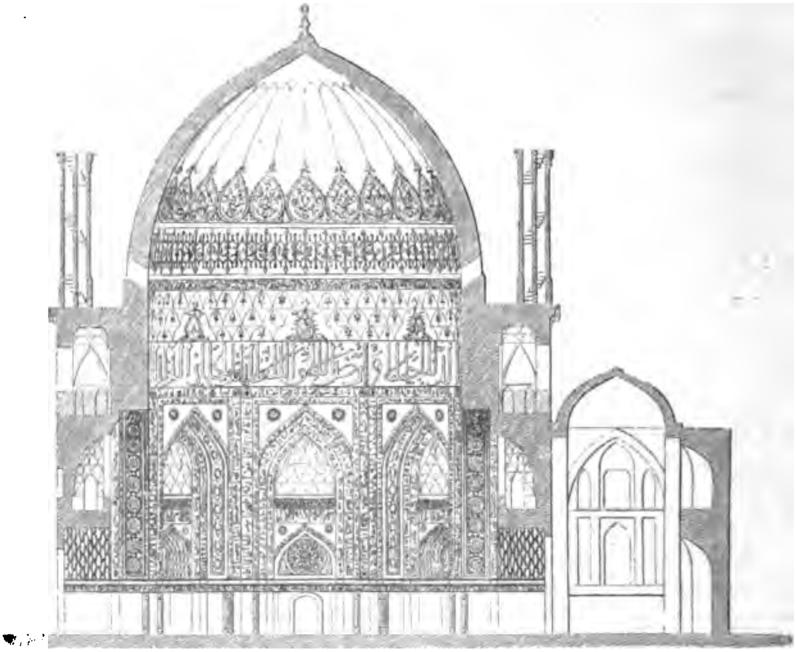
[1] The earliest attempt in this direction that I am acquainted with is the great portal of the palace at Meshita (Woodcut No. 266).

[2] Texier, from whose work the illustrations are taken, ascribes the building to another Khodabendah of the Sufi dynasty, A.D. 1577-85. Our knowledge, however, of the style is sufficient to show that the monument must be 200 or 300 years older than that king; and besides, the Sufis, not being Tartars, would not build tombs anywhere, much less in Sultanieh, where they never resided.


987. Tomb at Sultanieh. Scale 100 ft. to 1 in.

In general plan the building is an octagon, with a small chapel added opposite the entrance, in which the body lies. The front has also been brought out to a square, not only to admit of two staircases in the angles, but also to serve as a backing to the porch which once adorned this side, but which has now entirely disappeared.

Internally the dome is 81 ft. in diameter by 150 ft. in height, the octagon being worked into a circle by as elegant a series of brackets as perhaps ever were employed for this purpose. The form of the dome, too, is singularly graceful and elegant, and much preferable


988. Section of the Tomb of Sultan Khodabenda'h at Sultanieh. (From Texier's 'Arménie et la Perse.') Scale 50 ft. to 1 in.

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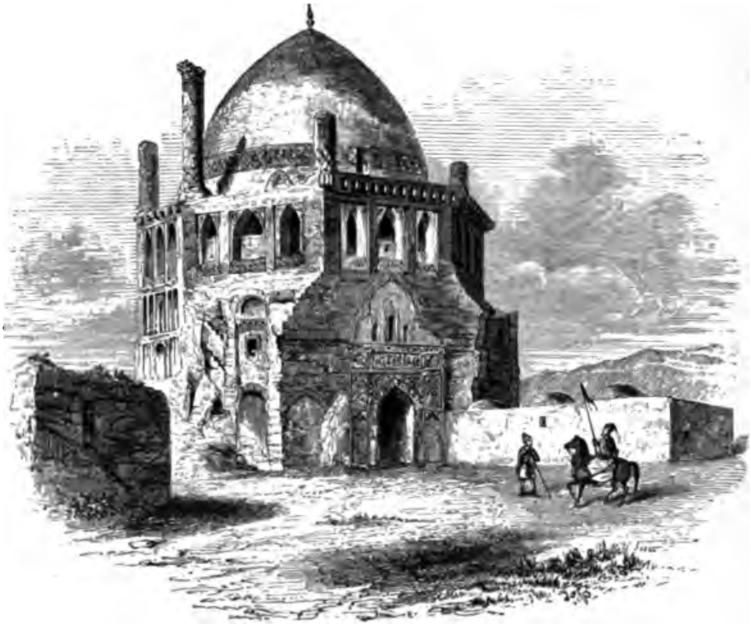
[1] 'Travels,' vol. i. p. 277.

to the bulb-shaped double domes subsequently common in Persian architecture. The whole is covered with glazed tiles, rivalling in richness those of the mosque at Tabreez, and with its general beauty of outline this building affords one of the best specimens of this style to be found either in Persia or any other country.

These works were, however, far surpassed in magnificence, though not in beauty, by those of the dynasty of the Sufis, who succeeded in 1499. The most powerful and brilliant sovereign of this race was Shah Abbas the Great (A.D. 1585–1629), whose great works rendered his capital of Ispahan one of the most splendid cities of the East.



989. View of the Tomb at Sultanieh.

Among these works, by far the most magnificent was the great *Maidan*, or bazaar, with its accompanying mosque and subordinate buildings. The Maidan is an immense rectangular area, 2600 ft. by 700,[1] surrounded on all sides by an arcade two storeys in height, consisting of 86 arches on the longer and 30 on the shorter sides, richly ornamented, and broken in the centre of each face by a handsome edifice. The great mosque is at one end, opposite to which is the bazaar gate, and in the longer side the Luft Ullah mosque; facing this is the Ali Kassi gate, which, in its various storeys and complicated suites of apartments, is in fact a palace rather than a gateway as we understand the term.

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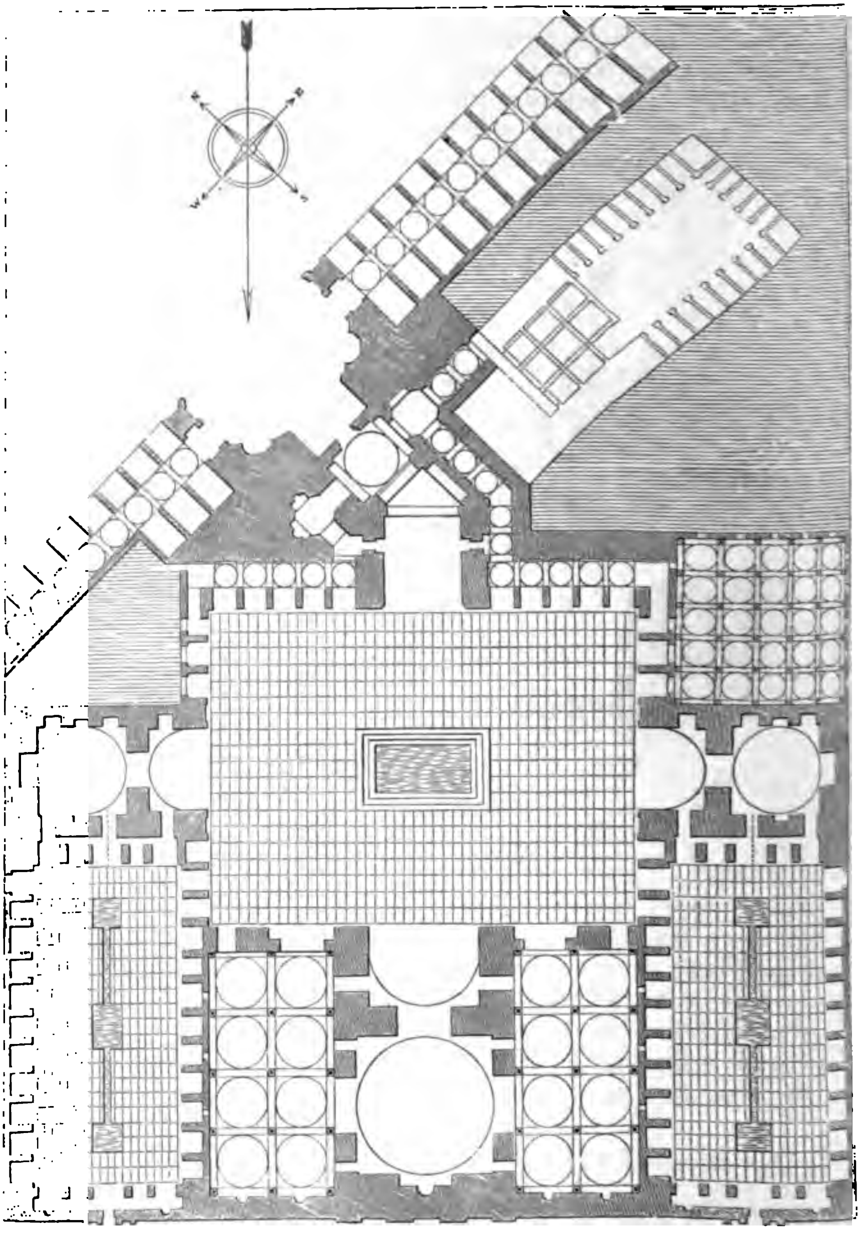
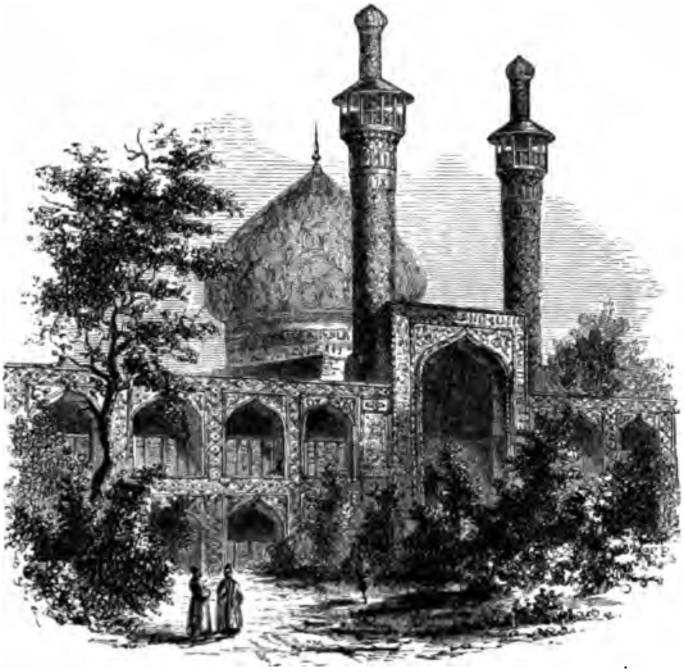
[1] Ker Porter's 'Travels,' vol. i. p. 432 *et seq.* I cannot help suspecting that there is some mistake about these dimensions—they seem excessive. The Piazza of St. Mark's at Venice, which resembles it more than any other area, is only 560 ft. long, with a mean breadth of about 250 ft. Probably 1500 feet by 500.



990. Great Mosque at Ispahan. (From Texier's Work.) Scale 100 ft. to 1 in.

The dimensions of the great mosque, or Mesjid Shah, may be judged of from the preceding plan. As will be perceived, the Maidan not facing Mecca, a bend is made in the entrance, which, however, is far from being unfavourable to the general picturesque effect of the group. The mosque itself is a rectangular building, the internal dimensions of which are 223 ft. by 130, the centre compartment being surmounted by a dome 75 ft. in diameter and 110 ft. high internally; but being double, like most domes of this age, its external height is 165 ft., which is also the height of the minarets attached to the mosque. On three sides the mosque is surrounded by courtyards, richly ornamented, and containing fountains and basins of water for the prescribed ablutions of the faithful. The principal court measures 225 ft. by 170, and surrounded as it is on all sides by façades in the richest style of Persian polychromatic decoration, the brilliancy of its architectural effect is almost unrivalled by any other example of its class. Both in architectural forms and in the style of ornament this mosque is inferior to those at Tabreez and at Sultanieh; but for mass and amount of decoration it is among the most magnificent specimens of its class. Taken altogether, the Maidan Shah, and its accompanying mosques and gates—the whole the work of one king and on one design—present a scene of gorgeous, though it may be somewhat



991. Madrissa of Sultan Husein at Ispahan. (From Flandin and Coste's 'Voyage en Perse.')

barbarous splendour, almost unequalled in the whole world. Even now, in its premature decay, it strikes almost every traveller with astonishment, though the style is not one that looks well in ruin, owing to the perishable nature of the materials employed, and the tawdry effect of glazed tiles, when attention is drawn to the fact that they are a mere surface ornament to the walls.

The forms and peculiarities of this style will be better judged of—in a woodcut at least—by the representation of the Madrissa, or college, of Husein Shah (Woodcut No. 991), the last of the Sufi kings of Persia; and though erected at the end of the 17th century, while the great mosque was built in the beginning of it, but little change seems to have taken place in the interval: the minarets are of the same form, the double bulb-shaped dome is similar, and the double arcades that surround the court of the mosque are the same in form as those that encircle the Maidan Shah.

From the time of the Afghan invasion, which took place during the reign of the Sultan Husein in the beginning of the last century, Persia does not seem to have recovered herself sufficiently to undertake any great works; some palaces, it is true, have been built, and mosques of inferior dimensions, but nothing really remarkable of late years. The influence of the corrupt styles of Europe has become too apparent to enable us to hope that she will ever again be able to recover her place in the domain of art.

Although it was sometimes brilliant, and always truthful, the Persian Saracenic is hardly entitled to rank among the really great or admirable styles of architecture. Its chief historic interest rests on the fact of its being a modern reproduction of the style of the ancient palaces of Nineveh and Babylon, using the same thick walls of imperfectly burned bricks, and covering them with the same brilliant coloured decorations of glazed and painted tiles and bricks, carrying this species of decoration to an extent never attempted in any other part of the world. This too constitutes its principal claim to interest in an artistic point of view, since it shows how far polychromatic decoration may be used, both internally and externally, not only without any offence to good taste, but with the most complete success in producing that beauty and splendour which is the aim of all architectural utterance.

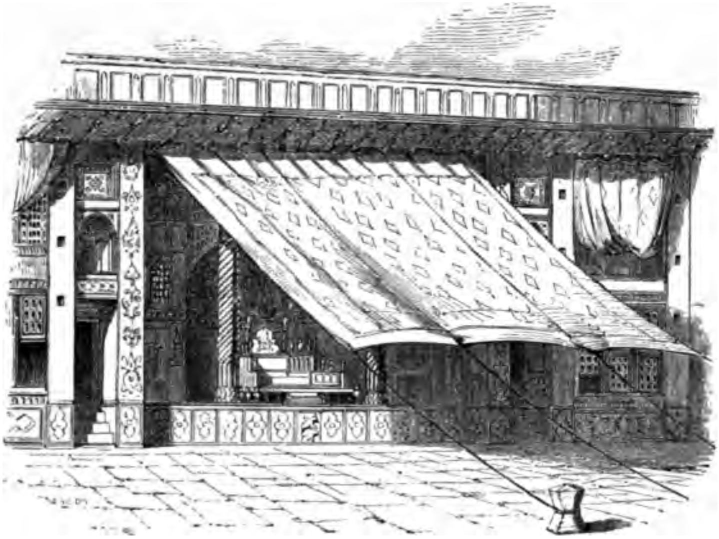
PALACES.

The Persian princes showed almost as much taste and splendour in their palaces as in their mosques; but these were not from their nature so capable of architectural display as the others. An Eastern palace neither requires that mass of apartments and offices which are indispensable in Europe, nor does the climate admit of their being massed together so as to form a single group, imposing from its size.

On the contrary, the Persian palaces generally consist of a number of pavilions and detached halls, and smaller groups of apartments scattered over a large space interspersed with trees and gardens, and only connected by covered arcades or long lines of canals, the centre of which is adorned by fountains of the most elegant forms.

Individually these detached buildings are often of great beauty and most elaborately ornamented, and the whole effect is pleasing and tasteful; but for true architectural effect they are too scattered; and the whole is generally very deficient in grandeur.

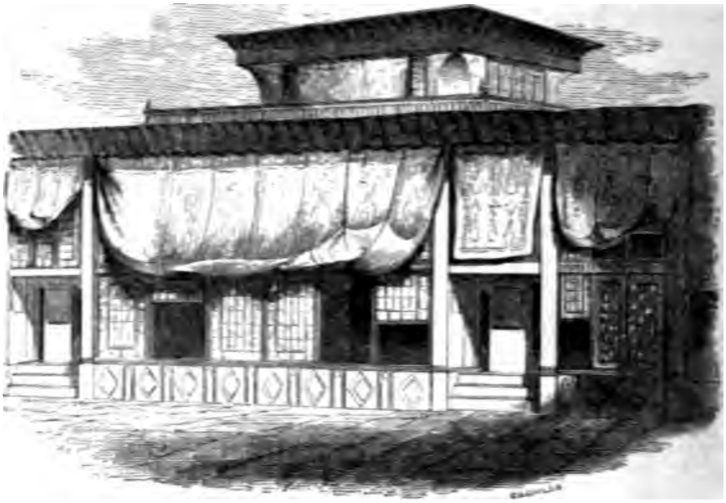
The throne-room at Teheran (Woodcut No. 992) is a fair specimen of these buildings, though, in fact, it is only a porch or deep recess opening on a garden, the front being supported or ornamented by two twisted columns. In front of these a massive curtain is drawn out when the room is used, and both for colour and richness of effect the curtain is virtually the principal feature in the composition.



992. Throne-room at Teheran. (From 'Nineveh and Persepolis Restored.')

The next example is taken from the palace of Char Bagh, or the "Four Gardens," at Ispahan, and shows the general picturesque form these buildings assume. It is by no means so favourable a specimen as the last, though this may arise more from the nature of the building than from any defect on the part of its architect. Many of the pavilions in the same palace are of great lightness and elegance, though, most of them being supported by wooden pillars, and being of very ephemeral construction, they hardly belong to the higher class of architectural art.

The Caravanserais form another class of buildings, not peculiar, it is true, to Persia, but which, from the character of the traffic in merchandise, and the general insecurity of the roads along which it is conducted, has received a great development in that country. Internally, their usual form is that of a square courtyard, surrounded by a range of arcades generally two storeys in height, each arch opening into a small square cell at the back. Externally they present only a high plain wall, surmounted by battlements and flanked by towers at each angle, and sometimes also by additional towers in the longer faces. The principal architectural ornament is lavished on the gateways, which are almost always higher than the contiguous walls, and often display great beauty of design combined with considerable elaboration of detail.

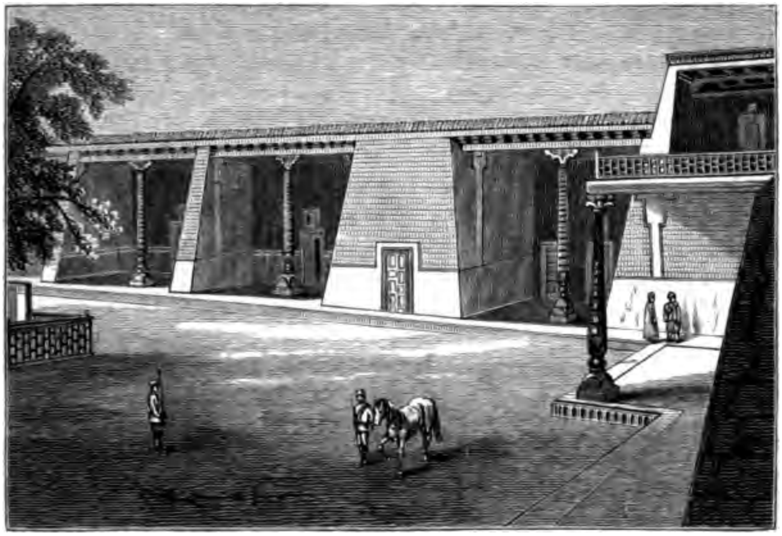


993. Palace at Ispahan. (From 'Nineveh and Persepolis Restored.')

It is not, however, only in these larger monuments that the Persians show an appreciation of the beautiful and a power of expressing it. As in most Eastern nations, the feeling seems innate, and all the minor objects they fabricate exhibit it, as well as the more important ones, and it is to the former that we must probably look in future for examples of Persian art, for her political position is such that she will hardly be able soon to attempt anything great or important in architectural art. There are still, however, resident in that country remnants of those races who built the palaces of Babylon and Nineveh; and if an opportunity were afforded them, they might still do something, if allowed to do it in their own way. It is to be feared, however, that European influence is extending through that country too fast for art; and that if they attempted anything, it will be only in the bastard Italian style, which, with the round hat, seems destined to make the tour of the globe.

TURKESTAN.

The progress of the Russians in Northern Asia has recently opened up whole regions that hitherto have been hidden from the light of European research, and the beautiful paintings of Verestchagin have rendered us familiar with the splendour of the capital of Timur the Lame. Unfortunately, however, no photographs have yet been published of Samarcand, and no plans of the buildings of that far-famed city. We have not seen any such detailed descriptions as would enable us to speak with anything like certainty of their affinities or difference with other buildings of the same age. All that can be said with certainty is that the great Mosque and Tomb of its founder at Samarcand are erected in the same style as the mosque at Tabreez (Woodcut No. 986), and the tomb at Sultanieh (Woodcut No. 989), and other buildings in Persia and Armenia, with only such slight differences as might be expected from their more northern locality. The whole façade of the mosque, together with minarets and domes, is covered with painted tiles—so far as can be ascertained—of extreme beauty of design, and the tomb is surrounded by screens of marble trellis-work very similar to what we find afterwards in the works of Timour's descendants at Agra and Delhi. The great interest, in fact, that attaches to these buildings arises not so much from their own intrinsic value as because they form a connecting link between the style of Persia and that of the Great Mogul dynasty in India, and,



991. Pavilion in the Khan's Palace at Khiva. (From a view in 'The Graphic.')

when properly investigated, they will serve to explain much that is now obscure in the history of the art in that country.

The buildings of these Northern capitals will probably also prove interesting as historical indications in another direction, as they retain traces of a modern style of architecture which, notwithstanding the distance in time, seems to be traceable back to the palaces of Nineveh and Persepolis. Verestchagin's paintings gave several illustrations of this style, which in a modified form is found in the oldest cave temples in India. Its most marked peculiarity is the elongated bulbous form of the shaft, rising from a broad shoe like base, and supporting a small bracket capital. The sketch on the previous page of a pavilion at Khiva explains its general features, but its merits as an architectural form arise from the beauty of the carved details with which it is ornamented, which cannot be expressed in so small a scale.

We probably know enough now of Northern Asia to render it probable that we can hardly expect to find there any buildings of great antiquity, or any of greater magnificence than those of Samarcand; but it seems equally, or more clear that, when properly investigated, these buildings will supply many missing links in our history, and explain a great deal that now seems mysterious.

BOOK II.

ANCIENT AMERICA.

CHAPTER I.

INTRODUCTORY.

CHRONOLOGY.

	DATES.		DATES.
Toltecs arrived in Anahuac	A.D. 648	City of Mexico founded	A.D. 1125
Toltecs abandoned the country	1051	Almitzotl conquered Guatemela	beginning of 16th century
Chichemecas arrived.	1170	Spaniards arrived	1519
Acolhuans arrived . . . . . . about	1200		
Aztecs reached Tula	1196		

ALTHOUGH considerable progress has been made during the last few years in clearing away the mists that hang over most of the problems connected with American antiquities, much still remains to be done before we can give a distinct or satisfactory answer to many of the questions that arise regarding them. We cannot yet say positively whether the Toltecs, the Aztecs, and other tribes who inhabited the Valley of Mexico, were successive waves of one great immigration from the North, or whether they belonged to different races of mankind. We cannot tell whether there was any connexion between the civilisation of Mexico and Peru. The historical difficulties are far from being settled, and, more than all these, it is still a matter of doubt whether American civilisation is wholly original and indigenous, or whether any portion of it was derived from the Old World.

The one consolatory fact in all this perplexity seems to be, that the materials certainly do exist by which it can be removed. So soon as any one conversant with such inquiries will undertake the investigation on the spot, he will be able to arrange all the buildings into chronological series, and fix at least their approximate dates. He will also be able to say how far the buildings in one province are akin to those in another, and to separate those which belong to other races; and he will be able to tell us whether there is any essential similarity between the styles of the Old and the New World, or whether the latter be really original. Whenever a sufficient number of photographs reach Europe the investigation may be undertaken here, but it will be very much easier on the spot. Hitherto the great difficulty has been that the drawings of American monuments—especially those published by Humboldt and Lord Kingsborough—cannot be depended upon. The one bright exception to this censure are those of F. Catherwood,[1] both those which he published separately, and those with which he illustrated the works of Mr. Stephens.[2] Had that artist undertaken to classify his work in a chronological series, he doubtless could have done it; but as the arrangement of the plates is purely topographical, and they are so far reduced to a common denominator by the process of engraving, the classification can hardly now be attempted by one not familiar with the buildings themselves. In the meanwhile there seems no good reason for doubting the conclusion which he and Mr. Stephens arrived at, that the cities which they rediscovered were those which were inhabited and in the full tide of their prosperity at the time of the Spanish Conquest. The buildings which we now see in ruins were probably then all in use, and many may have been in progress and unfinished at the time of that great disaster. On the other hand, it is extremely doubtful if any building in Central America can date from five centuries before that event: in Mexico some may be older, but their title to greater antiquity has not yet been satisfactorily made out.

Whatever uncertainty may exist with regard to Mexican history, there is nothing in it that can strictly be stigmatised as fabulous. The Mexicans do not pretend to any very remote antiquity or divine descent. There are no heroes who live thousands or tens of thousands of years: nor any of the other extravagances that usually mark the dawn of history in the Old World. On the contrary, the Mexican annals modestly commence with the arrival of the Toltecs in Anahuac in the 5th or 6th century, and with the beneficent teaching of a stranger, Quetzalcoatl, who lived among them, taught them architecture and the agricultural arts, instructed them in their religious duties, and then, like Lycurgus fifteen centuries earlier, left them by sea, promising to return.

For 300 or 400 years from this time the Toltecs lived in peace and prosperity, covering the table-land, it is said, with their monuments. But evil times came; famine, internecine wars, and disasters—interpreted as evidences of the wrath of the gods—drove them from their homes, and they migrated, it is said, southwards to Yucatan; where it is usually assumed that they erected the architectural monuments we now find in that country.

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[1] 'Views of Monuments in Central America, Chiapas, and Yucatan.' 25 plates, folio. London, 1844.

[2] 'Incidents of Travel in Central America and Yucatan,' by J. L. Stephens. 1st and 2nd series, 4 vols. 8vo. Murray, 1841, 1843.

Central America is, however, one of the most fertile countries in the world, and capable of supporting—indeed did support—an immense population with very little labour; so it seems probable that it was inhabited long before the time mentioned.[1] This, however, by no means militates against the idea that the Toltecs may have been the first to communicate to their new country many of the arts they had elaborated in Anahuac. Indeed, it is to such a combination of two not very dissimilar races that all the greatest results in art or civilisation have been attained in other parts of the world, and it may have been the case here also.

Politically the annals of Anahuac are a blank between the departure of the Toltecs and the arrival of the Aztecs in the middle of the 12th century. These seem to have been a people of different race from the former occupants of the valley, but sufficiently akin to take up the previous civilisation; and being reinforced by successive immigrations of tribes of the same race, and speaking apparently similar languages, they had at the time of the arrival of the Spaniards fully repeopled the valley and elaborated a very considerable degree of civilisation.

Again everything we read of, and every indication we have, leads us to suppose that the greatest development of civilisation in Mexico took place immediately before the Spanish Conquest, and thus that the time of highest prosperity was that which directly preceded its destruction. Four centuries had apparently sufficed to convert a tribe of Red Indians into a tolerably civilised community. Whatever their civilisation may have been, it could not have attained a very permanent character, for it vanished like a phantom at the first touch of the European; and the remnants of the Indians who still remain are as incompetent creatures as exist in any part of the world.

Till the investigations of the ethnologist are further advanced, it is impossible to feel any great confidence in the various theories that have been advanced on this subject. Without wishing to put it forward as a thing to be relied upon, it appears to me that the following scheme meets more nearly than any other the requirements of the case, while it amalgamates more perfectly the various facts ascertained by scientific men.

It is generally admitted that two races of men are found, either now living or whose remains are found in Mexican sepulchres. One of these is said to be allied to the Esquimaux, or races of that class, the other to the Red Indians. The former, I cannot help thinking, represent the Toltecs. It does seem that all along the east coast of America from Behring's Straits to California, races have always existed more or less closely allied to the Kamtchatdales or Esquimaux; and these may, at some early period, have advanced to the plains of Mexico. If they were of that blood there is no difficulty in understanding how they became builders.

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[1] The evidence collected by the Abbé Brasseur de Bourbourg, 'Voyage de Tehuantepec,' seems, if it can be depended upon, to confirm this idea.

On the other hand, there seems little doubt that the Aztecs were Red Indians, allied to those tribes who, so far as we know, always inhabited the Valley of the Mississippi and the countries to the eastward of it. They may have been capable of taking up an earlier civilisation, and, if their blood was mixed at all with the earlier inhabitants, of carrying it further; but in themselves they are utterly unprogressive and incapable of developing any attributes of civilised life.

In Yucatan we certainly have another race, but whether they were Caribs, or some other people whose traces have been lost, cannot now be easily ascertained. In Peru, and possibly also further north, there is certainly a strongly developed Polynesian element, and there may be other races still; but these four alone, mixed in varying quantities, are more than sufficient to account for all the varieties we find there in the course of our inquiries.

There still remains one question which is more germane to our present subject than even the others, though perhaps on the whole still more difficult to answer. It is this: Are the civilisation and arts of the ancient Americans original and indigenous, or did they receive any impulse from the natives of the Old World? One part of this may easily be disposed of. The absence of all domestic animals, the possession of only one of the cereals, the total ignorance of alphabetic writing and of the use of iron—though the country is full of the ore—and many other minor facts, seem sufficient to prove that no immigration of tribes or families could have taken place in such numbers as to bring their animals, their grain, or their materials, with them. This, however, by no means precludes the possibility of many missionaries having reached their shores, who, though bringing nothing but what they carried in their brains, could communicate doctrines, teach arts, and improve processes, and so communicate much of the civilisation of the countries from which they came.

Without laying too much stress on the somewhat mythic story of Quetzalcoatl, though there seems no good reason for doubting its main features, we have only to refer to the history of India between 250 B.C. and 700 A.D. to see what missionary zeal prevailed in those days. Asoka set the example, and by his missionaries and their successors the doctrines of Buddha were propagated from the shores of the

Mediterranean to the Yellow Sea; or, what is more to our purpose, we have only to read the travels of Fa Hian and Hiouen Thsang to see what dangers by land and sea the Chinese missionaries between the 4th and 7th centuries were prepared to brave in the service of the faith. It probably would have been easier to travel to Mexico from China *viâ* Behring's Straits than to reach India through Central Asia, and to return from Ceylon by sea. Whether or not such a journey was ever accomplished, is another question. I do not think that either Neumann [1] or D'Eichthal [2] have at all made out a satisfactory case to prove that the country of Fusang, from which the pilgrim Hoei Shin returned to China in the year 499, was Mexico. On the contrary the evidence of the domestic animals, &c., he speaks of, and other important details, all seem to tell the other way. It looks more as if Vancouver Island, or the coast thereabout, was the place indicated. But are there any remains of a half-civilised people there? Be this as it may, the story, which is authentic as far as it goes, seems to prove that Northern America was in communication with Northern Asia in the 5th century.

D'Eichthal's argument, that the Mexican sculptures are Buddhist, seems even more groundless. I have carefully examined the examples he adduces, and, from a tolerably intimate acquaintance with Buddhist art in Asia, may be permitted to say that I can see no trace of it in Mexico. If the argument were based on that Serpent-worship which almost everywhere underlies Buddhism in the Old World, it would not be so easy to refute it. There is a very considerable likeness between the sculptured forms of the Serpent-worship in the Old and in the New World. But it is a serious question, whether this arose from a similar instinct in the two races, or was communicated from the one to the other. My present impression is in favour of some intercommunication in so far as Serpent-worship is concerned.

Our knowledge of the architecture of Eastern Asia and of Western America is not yet sufficiently precise to enable us to base any very pointed argument upon it. It is curious, however, that as we advance eastward from the Valley of the Euphrates at every step we meet with forms of art becoming more and more like those of Central America. When we reach the sea we encounter at Suku in Java a teocalli, which is almost identical with that of Tehuantepec.[3] In Cambodia we have teocallis at Bakong and Bakeng, and no one would be startled if told that representations of some of the temples at Ongcor Thom in Cambodia were really taken from buildings found in Yucatan. In China many of the crinkum-crankums of their art find their close counterparts in America. But for the distance and the geographical difficulties, no one probably would hesitate to admit that the architecture of America may have been borrowed from the Old World. But how did it cross the ocean? At present that barrier seems almost insurmountable. But it may not always remain so: the inquiry is still in its infancy, and the tendency of all recent researches has been to show that there were more means of communication and a more direct connection between the nations of the world in ancient times than we have hitherto been disposed to believe was likely or even possible.

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[1] Ausland, 1845, Nos. 165, 168.

[2] D'Eichthal, 'Revue Archæologique,' vol. x. 1854, p. 188, and following numbers.

[3] Sir Stamford Raffles's 'History of Java,' vol. ii. p. 51.

CHAPTER II.

CENTRAL AMERICA.

CONTENTS.

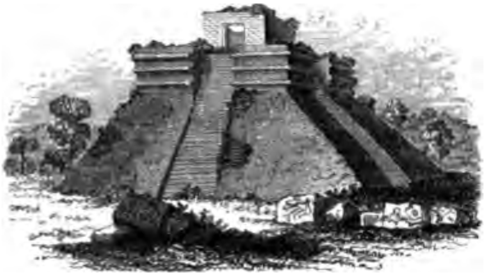
Historical Notice — Central American style — Temples — Palaces — Buildings at Palenque — Uxmal, &c.

THE Valley of Mexico, in which the first group of buildings we have to describe is situated, is a small tract in the centre of the table-land of Anahuac. Though not larger than Yorkshire, and one-third of it permanently under water, it was, at the time we first became acquainted with it, divided into three or four small States, which, notwithstanding continual wars among themselves, had managed to acquire a considerable degree of material prosperity. After making every allowance for the exaggeration of the Spanish and native historians, the remains of the Aztec capitals attest an amount of population and a degree of organisation which it is impossible to overlook or deny, and it seems that it was at their last moment that this development was greatest; for, immediately before the Spanish Conquest, all the States of the valley, tired of their ruinous wars, had joined their forces together, and, thus combined, proved more than a match for any of the surrounding States. They spread their arms and influence to the Mexican Gulf, penetrated to the shores of the Pacific, and on one occasion are even said to have crossed the Isthmus of Tehuantepec, and reached the confines of Guatemala. These last expeditions seem to have been undertaken merely to obtain prisoners for their horrid rites of human sacrifice, of which they were becoming passionately fond; and they made no settlement in these countries sufficient to influence either their arts or institutions in any way. Shortly after this, the conquest of the Spaniards under Cortes put an end to the kingdom and power of the Aztecs for ever.

The principal monuments of the valley are the Teocallis—literally Houses of God—the Temples of the people. These are pyramids in terraces with flat tops, and always surmounted by a chamber or cell which is in fact the temple itself. They seem to be of all ages, for if one may trust the tradition, that of Cholulu is as old as the early Toltecs, whereas the great teocalli of the city of Mexico was only finished five years before the discovery of America by Columbus, and the Spaniards met with many persons who had assisted in its erection. It has, however, with all the native buildings of the city, been swept away by the ruthless bigotry of the conquerors. Independent of its own interest, this is the more to be regretted as the possession of a single monument of authentic date would form a starting-point for our investigations and serve as a check on all our theories.

Of these teocallis, the largest, probably also the oldest, is that of Cholulu. Its dimensions, in so far as they can be ascertained in its present ruinous state, are 1440 ft. square and 177 ft. in height, divided in four storeys, the fifth being formed by the cell or temple, which has now been replaced by a chapel dedicated to the Virgin Mary. The whole is composed of badly-burnt bricks and mud, and is now so overgrown with trees, that it is difficult to make out its form, but in Humboldt's time it apparently was freer from obstruction and more easily traced.

There are two pyramids at Teotihuacan, the largest of which is apparently a square of 645 ft., with a height of 171, and there are others at Tezcuco of about the same dimensions, and, like them, divided into five or seven storeys, but the most interesting of those yet brought to light is that of Xochicalco. It is situated on the top of what appears to be a natural elevation, but which has been fashioned into terraces by art. The pyramid itself is in five storeys, the stone facing of the three upper of which has been removed to repair a sugar-mill in quite recent times, but the two lower still retain their sculptures and architectural ornaments. Mr. Tylor gives the date of 945 to this building,[1] and there does not seem to be any reason for doubting its general correctness. If it is so, the possession of photographs of its bas-reliefs and cornices would go far to clear up half the difficulties which beset the question.[2] One monument in the middle of the series with sculptural and architectural details, and an authentic date, is nearly all that is required for the purpose.


995. Pyramid of Oajaca, Tehuantepec. (From the 'Smithsonian Contributions to Knowledge.')

Besides these great many-storeyed pyramids there are numerous examples in various parts of the country, of one storey only; several of these have been described, but unfortunately not drawn. Their general arrangement may, however, be judged of from the annexed example from Oajaca.

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[1] 'Anahuac,' by Edward B. Tylor, 1861; pp. 188, 194.

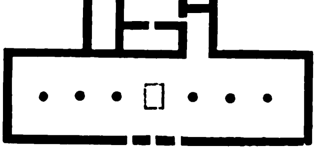
[2] The plate published by Humboldt, representing one of the bas-reliefs, is so incorrect as to be absolutely worthless.

Like all others in Mexico, it is only a device to raise a temple to such a height as should give it dignity and enable the ceremonies performed on its upper platform to be seen by all the people.

It is indispensably necessary to bear this distinction in mind, in speaking of these monuments, as careless writers connecting the word Pyramid with Egypt have been too apt to confound together two classes of monuments entirely distinct and dissimilar. The Egyptian pyramid is always a tomb. The principal object of its erection is in the sepulchral chamber in its centre. It always terminates upwards in a point. In no instance are there external steps leading to a cell or chamber on the apex. In fact, they were always tombs; never temples. The Assyrian pyramids, on the contrary, have much more affinity with the buildings of which we are now speaking. They were always in terraces, the upper platform was always crowned by a chamber or cell, and there were external steps leading to this, which was the principal object of the erection. In investigating the history of Eastern art this form of temple has been traced from Mesopotamia to the shores of the Eastern Ocean. If we still, however, hesitate to pronounce that there was any connection between the builders of the pyramids of Suku and Oajaca, or the temples of Xochicalco and Boro Buddor, we must at least allow that the likeness is startling and difficult to account for on the theory of mere accidental coincidence.

One thing, at all events, seems clear. If we are at any time to trace a connection between the architecture of the New and the Old World it is in the direction above indicated that light is to be looked for. At all events it seems as if it could not now be long before we ascertain whether any connexion did exist between the arts of the two continents, or whether we may regard that of America as wholly indigenous.

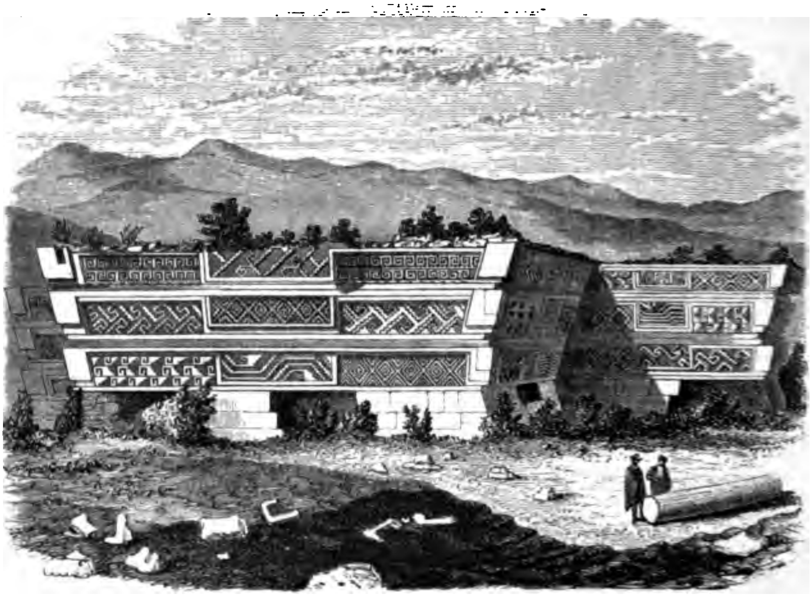
Almost, however, as if to warn us to beware of jumping too rapidly to conclusions of this class, we meet in Mexico occasionally with such a monument as that at Mitla, which is so entirely original as to defy the stoutest advocate to find an associate for it. As will be seen from the annexed plan, it consists of a portico, measuring 160 ft. across, its roof supported by a row of six pillars down the centre, and having behind it a square building, measuring about 65 ft. each way, in the centre of which is a court with four apartments opening into it, the entrances of which are so arranged as to secure the utmost amount of privacy. Originally there appear to have been four such buildings, arranged round a courtyard, but only one is now perfect.



996. Plan of Temple at Mitla. Scale 100 ft. to 1 in.

If, however, the plan is original, the style of ornamentation is still more so. The walls slope outwards, which is not the case in any other known building. The panels are filled with frets and forms such as are only found in Mexico, and are entirely unlike anything found elsewhere; and the whole building is such, that if it stood alone, or all Mexican buildings were like it, we should at once be obliged to admit that the style was entirely original, and formed without any connection with the older world.

Its use is said to be sepulchral, and there are underground chambers which would countenance that belief, according to our views. In hot climates, however, subterranean apartments are appropriate rather to the living, and are, when met with, generally the best in the house; so that, without some more evidence, it would appear rather to be a palace, which the arrangement of its internal chambers and its whole appearance would more certainly indicate. Its age is not known, but in the Aztec paintings executed immediately before, and in some instances subsequently to, the conquest, the same forms and the same style of decoration constantly appear. This is not conclusive, for the same architectural forms may in this country have prevailed throughout, for anything we know; but judging by the rules of European criticism, the building does not date from long before the time of the conquest.



997. View of the Palace at Mitla. (From 'Smithsonian Contributions to Knowledge,' vol. ix.)

Whenever a stable government is established in that unhappy country, and the artist and photographer are enabled to pursue their occupations in security and at leisure, it is to be hoped that materials will become available for completing this chapter of our history. At present, it must remain nearly a blank, because so few representations of Mexican monuments exist on which reliance can be placed.

YUCATAN.

It is extremely difficult to determine whether it is owing to their original paucity, or to their destruction by the Spaniards, that the monuments in the province of Mexico are now so few and far between. If we may judge from the glowing descriptions of the conquerors, and the analogy of the remains in Yucatan, we may almost certainly ascribe their disappearance to the bigotry or the avarice of the Europeans. Be this as it may, it is certain that the moment we pass the southern boundary of Mexico and enter the peninsula generally known as Yucatan, which for our present purpose must be considered as including Costa Rica, we find a province as rich in architectural remains as any of the same extent in the Old World, not even excepting Cambodia, which is the one it most nearly resembles. In this region Messrs. Stephens and Catherwood visited and described between fifty and sixty old cities; and, if we may trust native reports, there are others in the centre of the land even more important than these, but which have not been visited by any European in modern times. Of the cities described by these travellers, Uxmal, Palenque, Kabah, Chichen Itza, and others, are really magnificent. The first-named almost rivals Ongcor in splendour and extent, though it falls far short of it in the elegance or beauty of detail of its buildings.

As before hinted, there seems no reason for dissenting from the conclusion Messrs. Stephens and Catherwood arrived at regarding their age. It is deliberately expressed by the last-named author in his folio work (page 8) in the following terms:—"I do not think we should be safe in ascribing to any of the monuments which retain their forms a greater age than from 800 to 1000 years; and those which are perfect enough to be delineated I think it is likely are not more than from 400 to 600 years old." In other words, they belong to the great building epoch of the world—the 13th century, or a little before or after that time.[1] It seems more than probable, therefore, that the great buildings at Uxmal are contemporary with the temples of Nakhon Wat and Hullabeed, and the cathedrals of Rheims and Toledo. Whether or not there was any communication direct or indirect between these buildings, which are geographically so remotely distant, is another question, to which no satisfactory answer can be given in the present state of our knowledge, and if any is attempted, it must be a negative one.[1]

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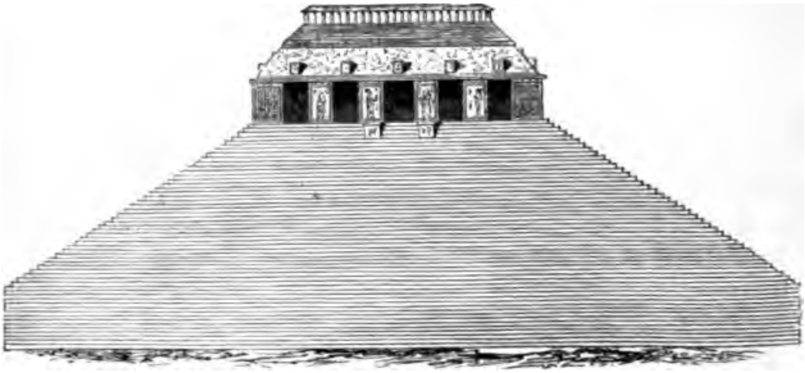
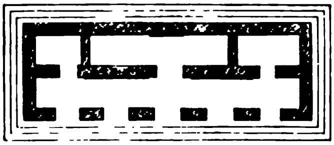
[1] There is a celebrated bas-relief on the back wall of a small temple at Palenque, representing a man offering a child to an emblem very like a Christian cross. It is represented in the first series of the 'Incidents of Travel,' vol. ii. p. 344. None of the sculptures have given rise to such various interpretations; but nothing would surprise me less than if it turned out to be a native mode of representing a Christian baptism, and was therefore subsequent to the conquest.

As in Mexico, the principal monument of Yucatan is the Teocalli. In the latter province, however, they seem to differ somewhat in design from those above described. They are not generally in terraces, but rise, at an angle of about 45°, to the level of the platform on which the temple stands; and a magnificent unbroken flight of steps leads from the base of the building to its summit. Almost all these retain more or less of the remains of architectural magnificence that once adorned their summits. The annexed Woodcut, No. 998, representing the elevation of a temple at Palenque (the plan of which is shown below), supported by a pyramid will give a good general idea of their form. The pyramid is about 280 ft square, and 60 ft. in height: on the top of it stands the temple, 76 ft. wide in front and 25 ft. deep, ornamented in stucco with bassi-relievi of better execution than is usually found in these parts, and



998. Elevation of Teocalli at Palenque. Scale 50 ft. to 1 in.



999. Plan of Temple. Scale 50 ft. to 1 in.

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[1] Since the first edition of this work was published, a folio work has appeared in Paris, entitled 'Les Ruines de Pelenque,' illustrated by plates, made under the superintendence of M. de Waldeck, with text by the Abbé Brasseur de Bourbourg. The text is certainly not to be trusted. The plates add little to what we learn from Catherwood's drawings, and I do not feel sure how far that little is to be depended upon.

In so far as they go they confirm the idea of the famous cross bas-relief being of Christian origin.

with large hieroglyphical tablets, whose decipherment, were it possible, would probably reveal to us much of the history of these buildings.

The roof is formed by approaching courses of stone meeting at the summit, and following the same outline externally, with curious projections on the outside, like dormer windows, but meant apparently either for ornament or as pedestals for small idols, or for some similar purpose.

The other temples found in Yucatan differ but little from this one, except in size, and, architecturally speaking, are less interesting than the palaces—the splendour of the temple consisting in the size of its pyramid, to which the superstructure is only the crowning member; in the palace, on the other hand, the pyramid is entirely subordinate to the building it supports, forming merely an appropriate and convenient pedestal, just sufficient to give it a proper degree of architectural effect.

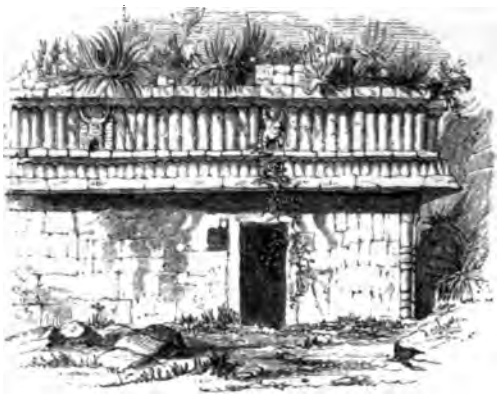
In speaking of the palaces it would be most important, and add very much to the interest of the description, if some classification could be made as to their relative age. The absence of all traces of history makes this extremely difficult, and the only mode that suggests itself is to assume that those buildings which show the greatest similarity to wooden construction in their details are the oldest, and that those in which this peculiarity cannot be traced are the more modern.

This at least is certainly the case in all other countries of the world where timber fit for building purposes can be procured; there men inevitably use the lighter and more easily worked vegetable material long before they venture on the more durable but far more expensive mineral substance, which ultimately supersedes it to so great an extent. Even in Egypt, in the age of the pyramid-builders, the ornamental architecture is copied in all its details from wooden constructions. In Greece, when the art reached its second stage, the base is essentially stone, and the upper part only copied in stone from the earlier wooden forms; and so it was apparently in Mexico; the lower part of the buildings is essentially massive stone-work, the upper part is copied from forms and carvings that must originally have been executed in wood, and are now repeated in stone.

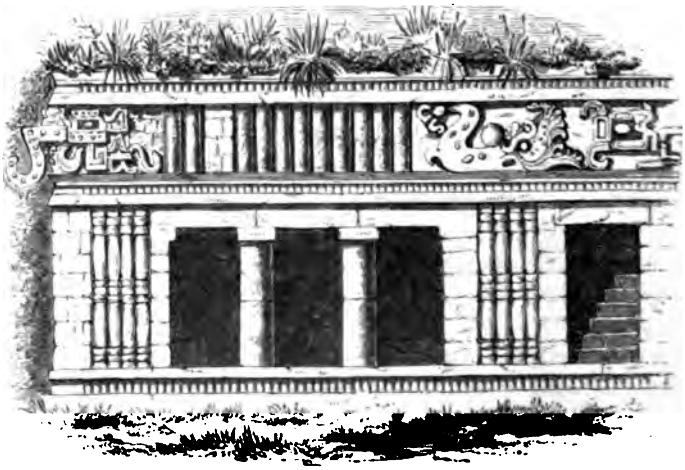
The following woodcut, for instance, represents in its simplest form what is repeated in almost all these buildings—a stone basement with square doorways, but without windows, surmounted by a superstructure evidently a direct copy of woodwork, and forming part of the construction of the roof.

In most cases in Yucatan the superstructure is elaborately carved with masks, scrolls, and carvings similar to those seen on the prows of the war boats, or in the Moraïs or burying-places of the Polynesian islanders.

Sometimes pillars are used, and the wooden construction is carried even lower down, though mixed in that case with parts of essentially lithic form. Barring the monstrosity of the carvings, there is often, as in the palace at Zayi (Woodcut No. 1001), a degree of elegance in the design by no means to be despised, more especially when, as in this instance, the building rises in a pyramidal form in three terraces, the one within and above the other, the lowest, as shown in the plan (Woodcut No. 1002), being 260 ft. in length, by 110 ft. in width. This, though far from being the largest of these palaces, is one of the most remarkable, as its terraces, instead of being mere flights of steps all present architectural façades, rising one above the other. The upper and central tier may possibly have been a seven-celled temple, and the lower apartments appropriated to the priests, but it is more probable that they were all palaces, the residences of temporal chiefs, inasmuch as at Uxmal a pyramidal temple is attached to the building called the Casa del Gubernador, which is extremely similar

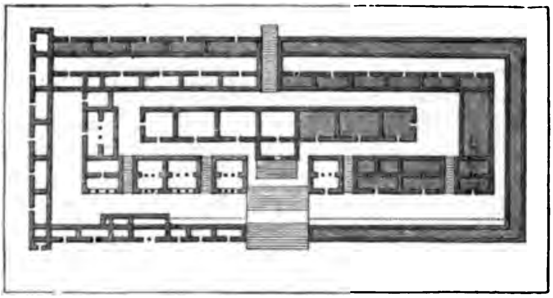


1000. Elevation of Building at Chunjuju. (From a Drawing by F. Catherwood.)



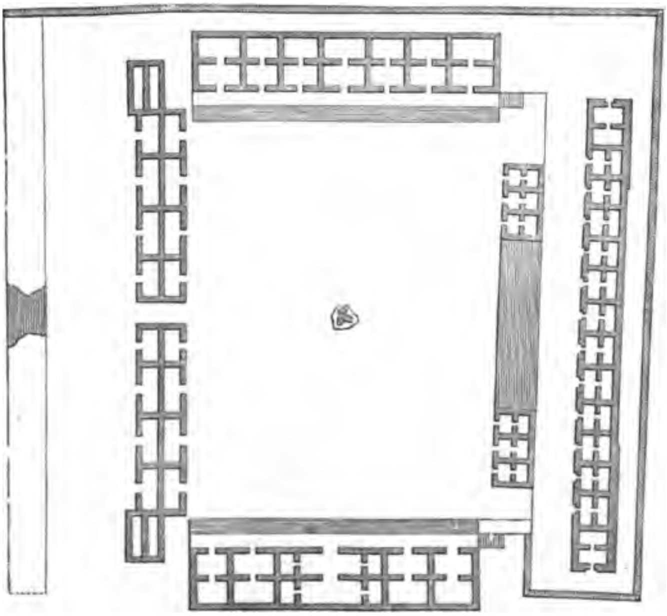
1001. Elevation of part of Palace at Zayi. (From a Drawing by F. Catherwood.)

to this, though on a still larger and more ornate scale. There are other instances of the palace and temple standing together.



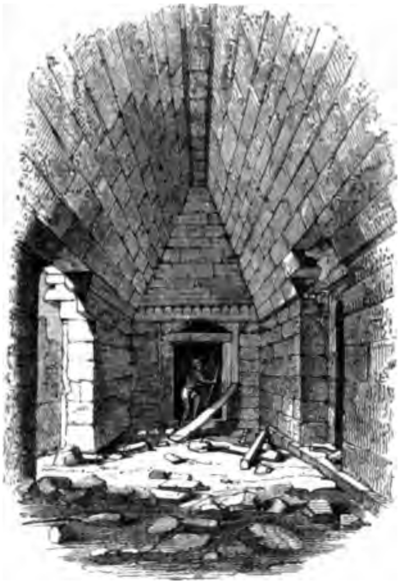
1002. Plan of Palace at Zayi. Scale 100 ft. to 1 in.

Sometimes, instead of the buildings standing within and above each other, as in the last example, they are arranged around a courtyard, as in that called the Casa de las Monjas at Uxmal (Woodcut No. 1003), one of the most remarkable buildings in Central America, for its size, as well as for the elaborateness of its decorations. It is raised on three low terraces, reaching a total height of 20 ft. The block to the south, 260 ft. long, is pierced by a triangular-headed gateway, 10 ft. 8 in. wide, leading to a courtyard, measuring upwards of 200 ft. each way, and surrounded on all sides by buildings, as shown in the plan; which, though only one storey in height, from their size and the elaborateness of their decorations, form one of the most remarkable groups of buildings in the world.



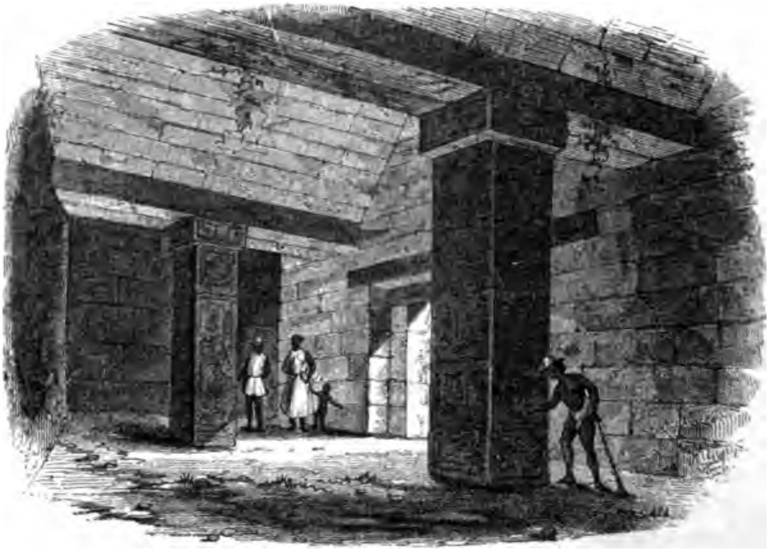
1003. Casa de las Monjas, Uxmal. Scale 100 ft. to 1 in.

In the same city is the other building, just referred to, called the Casa del Gubernador, somewhat similar to the principal of the three edifices composing the Casa de las Monjas, but larger and even more elaborate in its decorations. It stands alone, however, with only a temple attached unsymmetrically to one angle of it.



1004. Interior of a Chamber, Uxmal. (From a Drawing by F. Catherwood.)

With regard to construction, as above remarked, the style may be generally characterized as one remove from the original wooden construction of early times. No wooden buildings, or even wooden roofs, now remain, nor could any have been expected to resist the effects of the climate: but many of the lintels of the doorways were formed by wooden beams, and some of these still remain, though most of them have perished, bringing down with them large portions of the walls which were supported by them. In other instances, and generally speaking in those that

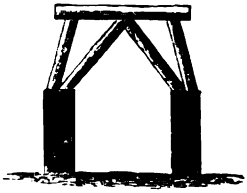


1005. Apartment at Chichen Itza. (From a Drawing by F. Catherwood.)

seem most modern, the upper parts of the doorways, as well as the roofs of the chambers, are formed by bringing the courses nearer together till they meet in the centre, thus forming a horizontal arch, as it is called, precisely as the Etruscans and all the earlier tribes of Pelasgic race did in Europe at the dawn of civilisation, and as is done in India to this day. This form is well shown in the annexed woodcut, representing a chamber in the Casa de las Monjas at Uxmal, 13 ft. wide. The upper part of the doorway on the right hand has fallen in, from its wooden lintel having decayed.

A still more remarkable instance of this mode of construction is shown in the Woodcut No. 1005, representing a room in a temple at Chichen Itza in Yucatan. The room is 19 ft. 8 in. by 12 ft. 9 in.; in the centre of it stand two pillars of stone, supporting beams of sapote-wood, which also forms the lintels of the door, and over these is the stone vaulting of the usual construction: the whole apparently still perfect and entire, though time-worn, and bearing the marks of as great age as any of the other buildings of the place.

When the roof was constructed entirely of wood, it probably partook very much of the same form, the horizontal beam being supported by two struts meeting at the centre, and framed up at the sides, which would at once account for the appearances shown in the Woodcuts Nos. 1000, 1001. It is also probable that both light and air were introduced above the walls, between the interstices of the woodwork; which is further confirmed by the strange erection on the top of the Casa at Palenque (Woodcut No. 998), where the openings look very like the copy of a ventilator of some sort.


1006. Diagram of Mexican construction.

It is, of course, impossible to ascribe any very remote antiquity to buildings containing so much wood in their construction, and erected in a climate so fatal to the durability of any class of buildings whatever. In addition to this, it must be borne in mind that the bas-reliefs are generally in stucco, which, however good, is still a very perishable material, and also that the painting on these and on the walls is still bright and fresh. In such a climate as that of Egypt no argument could be drawn from these circumstances; but in a country subject to tropical rains and the heat and dryness of a tropical summer the marvel is that they should have lasted four or five centuries, and still more that they should have resisted so long the very destructive powers of vegetation. Taking all these circumstances together, the epoch of their erection does not seem a matter of doubt, and all that remains for the elucidation of their history is that they should be arranged in a sequence during the six or eight centuries which may have intervened between the erection of the oldest and the most modern of these mysterious monuments.

CHAPTER III.

PERU.

CONTENTS.

Historical Notice — Titicaca — Tombs — Walls of Cuzco, &c.

CHRONOLOGY.

	DATES.
Manco Capac	A.D. 1021
Mayta Capac, 4th Inca, conquers Aymara	1126
Conquest by Pizarro	1534

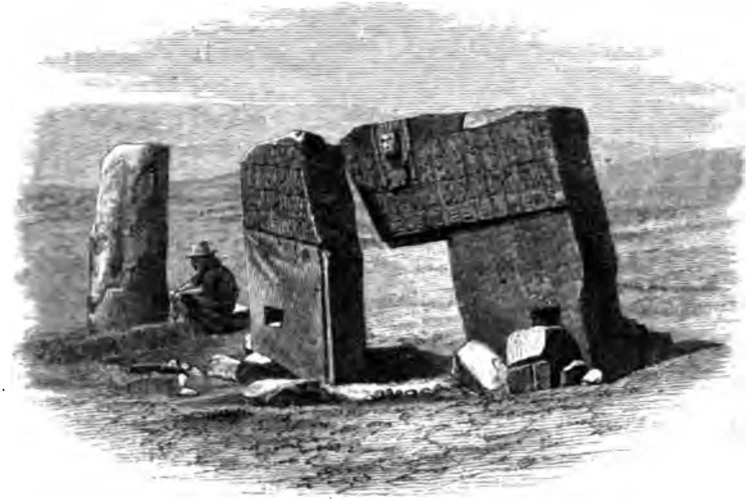
PERU is situated geographically so near to Mexico, and the inhabitants of both countries had reached so nearly to the same grade of civilisation at the time when the Spaniards first visited them and destroyed their native institutions, that we might naturally expect a very considerable similarity in their modes of building and styles of decoration. Nothing, however, can be further from the fact; indeed it would be difficult to conceive two people, however remotely situated from one another, whose styles of art differ so essentially as these two.

The Mexican buildings, as we have just seen, are characterised by the most inordinate exuberance of carving, derived probably, with many of the forms of their architecture, from wooden originals. Peru, on the other hand, is one of the very few countries known where timber appears to have been used in primitive times so sparingly that its traces are hardly discernible in subsequent constructions; and, either from inability to devise, or from want of taste for, such a mode of decoration, the sculptured forms are few and insignificant.

The material which the Peruvians seem to have used earliest was mud, and in that rainless climate many walls of this substance, erected certainly before the Spanish conquest, still remain in a state of very tolerable preservation. The next improvement on this seems to have been a sort of rubble masonry or concrete: the last, a Cyclopean masonry of great beauty and solidity. None of these forms, nor any of their derivatives, are found in Mexico; the climate would not permit of the use of the first—hardly of the second; and in all their buildings even the earliest, the Mexicans seem to have known how to use stones carefully squared and set with horizontal beds.

Another distinction which Peruvian art has in common with many of those derived from purely stone construction, is the sloping sides of the openings—a form invented on purpose to diminish the necessary size of the lintel. There are two discharging arches so constructed at Uxmal, but, so far as is known, none anywhere else; and no single opening of that class in the whole architectural province of Mexico. The roofs and upper parts of the larger openings, on the contrary, almost universally slope in that country. In Peru the roofs are always flat, or domical, and the sides of the openings always straight-lined.

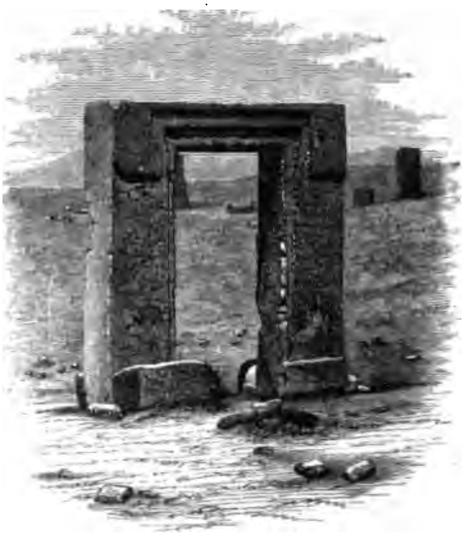
These remarks ought perhaps, in strictness, to be applied to the architecture of the Incas alone—the only one with which we have hitherto been made acquainted. Recently, however, it has dawned upon us, that before the time of Manco Capac the regions of Peru about the Lake Titicaca were inhabited by a race of Aymaras, who have left traces of their art in this region. Some illustrations of the remains of Tia Huanacu, at the southern end of Lake Titicaca, have reached this country, and from them we gather that the style is essentially different from that of the Incas. The most characteristic distinction being that in the Aymara style all the jambs of the doors are perpendicular, and all the angles right angles. In the Inca style, on the contrary, the jambs are almost all universally sloping, and rectangular forms are by no means common.



1007. Ruined Gateway at Tia Huanacu. (From a Photograph.)

At Tia Huanacu there are two doorways, each cut out of a single block of hard volcanic stone. That shown in Woodcut No. 1007 measures 10 ft. in height and 13 ft. 3 in. across the top; or rather did before it was broken in two, apparently by an earthquake shock.

In the centre of it is a mask cut with very considerable skill, and on each side a number of panels containing incised emblematical figures, whose purport and meaning have not yet been explained. The other doorway (Woodcut No. 1008) is erect and entire, but perfectly plain. Its only ornaments are square sinkings cut with the admirable precision and clearness characteristic of the style.[1]



1008. Gateway at Tia Huanacu. (From a Photograph.)

There is also at Tia Huanacu a great mound, apparently about 1000 ft. long by 400 in width, but the stone revêtment that gave it form has been removed in modern times, so that its shape is undistinguishable. It was apparently surrounded by a range of monolithic pillars or obelisks, like a Ceylonese dagoba, and had a wall of Cyclopean masonry outside these. There is also a square marked out by similar pillars, each of a single stone, 18 to 20 ft. in height, but whether originally connected or not cannot now be ascertained. The wonder of the place, however, is a monument of very uncertain destination, called the "Seats of the Judges," consisting of great slabs of stone—there are either three or four, each 36 ft. sq. and 5 ft. thick, at one end of which the seats are carved. Without detailed plans and drawings it is difficult to form any reliable opinion regarding these remains, but it does seem that the people who executed them had a wonderful power of quarrying and moving masses, and an aspiration after eternity very unlike anything else found in this continent, and the details of their ornamentation neither resemble those of Mexico nor the succeeding style of the Incas.[2]

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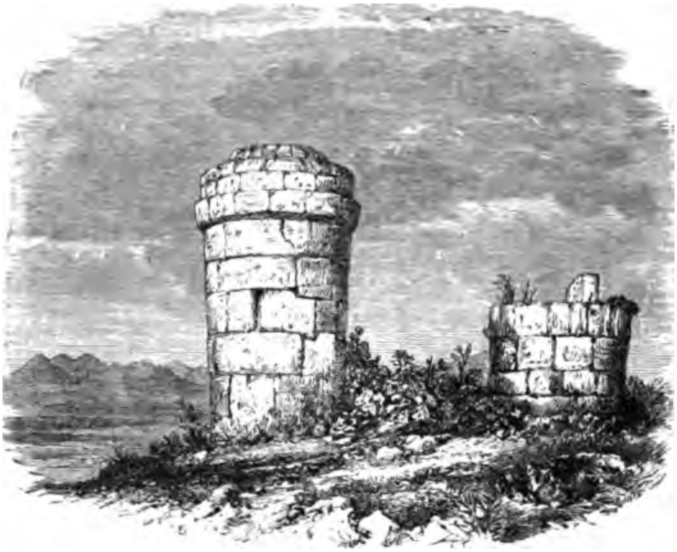
[1] It is only fair to state that Mr. Markham (Journal Roy. Geo. Soc., vol. xli., p. 307) denies the Aymara origin of the Tia Huanacu ruins, and ascribes them to the Incas, and consequently disputes the distinction pointed out above. The truth seems to be that, until we get more photographs or detailed drawings, all conclusions regarding Peruvian architecture must be considered as more or less hypothetical.

[2] For the principal part of this information I am indebted to Mr. William Bollaert and the photographs of the Messrs. Helsby, of Liverpool, and also to a paper on the Aymara Indians, by Dr. David Forbes, communicated to the Ethnological Society of London in June 1870.

In his travels in Peru, Mr. Markham describes several towers as existing at Sillustani (Woodcut No. 1009), which he ascribes to the same people. These are certainly sepulchral, and are still filled with bones, which were apparently thrown in by an opening at the top, and rested in a chamber in the centre of the building.

Mr. Markham informs us that there are several other monuments of this class in the same district, about which it would be extremely interesting to know more. As there seems little doubt that they are older than the time of the Incas they must modify to a considerable extent any opinion we may form with regard to the origin of their art, though at the same time they add another to the unsolved problems connected with American architecture.

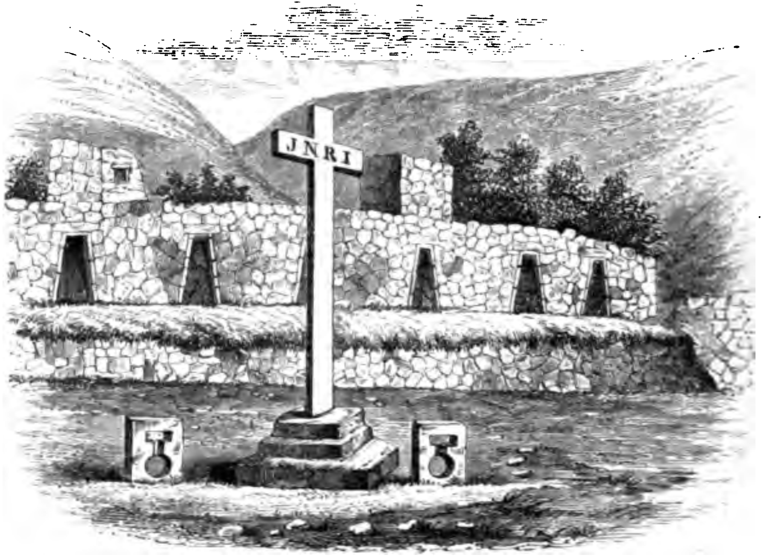


1009. Tombs at Sillustani. (From a Drawing by Clements Markham, Esq.)

Besides the strongly-marked distinction that exists between the architecture of Mexico and Peru, we have the negative evidence of their history and traditions, which make no mention of any intercourse between the Peruvians and any people to the northward. This, however, is not of much weight, as there are no accounts at all which go farther back than three or four centuries before the Spanish conquest, and our knowledge of who the Aymaras were is still vague in the extreme.

At about that period it is fabled that a godlike man, Manco Capac, appeared, with a divine consort, on an island in the Lake of Titicaca, journeying from whence they taught the rude and uncivilised inhabitants of the country to till the ground, to build houses and towns, and to live together in communities; and made for them such laws and regulations as were requisite for these purposes.

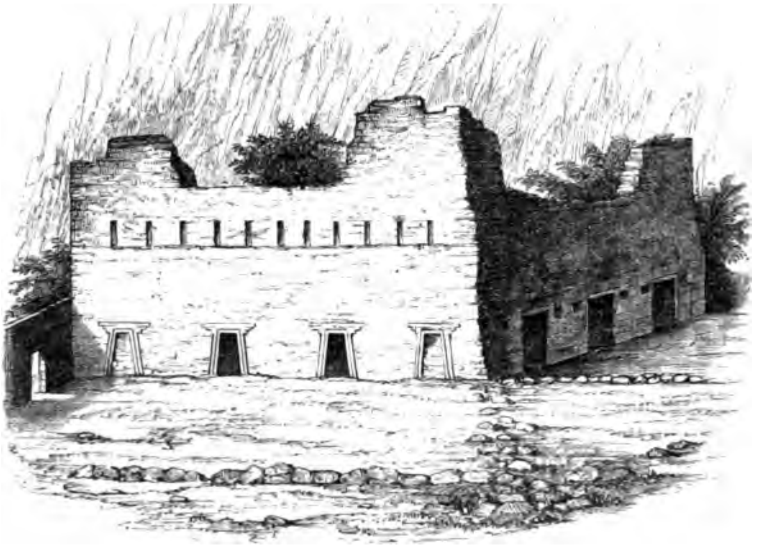
Like the Indian Bacchus, Manco Capac was after his death reverenced as a god, and his descendants, the Incas, were considered as of divine origin, and worshipped as children of the Sun, which was the great object of Peruvian adoration. At the time of the Spanish conquest the twelfth descendant of Manco Capac was on the throne, but, his father having married as one of his wives a woman of the Indian race, the prestige of the purity of Inca blood was tarnished, and the country was torn by civil wars, which greatly facilitated the progress of the Spaniards in their conquests under the unscrupulous Pizzaro.



1010. Ruins of House of Manco Capac, in Cuzco. (From a Sketch by J. B. Pentland.)

Both from its style and the traditions attached to it, the oldest building of the Incas seems to be that called the house of Manco Capac, on an island in the Lake of Titicaca. The part shown in the woodcut (No. 1010) is curvilinear in form, standing on a low terrace, and surmounted by upper chambers, hardly deserving the name of towers. All the doorways have sloping jambs, and the masonry is of rude, irregular polygonal blocks of no great size. Inside the wall are a number of small square chambers, lighted only from the doorway.

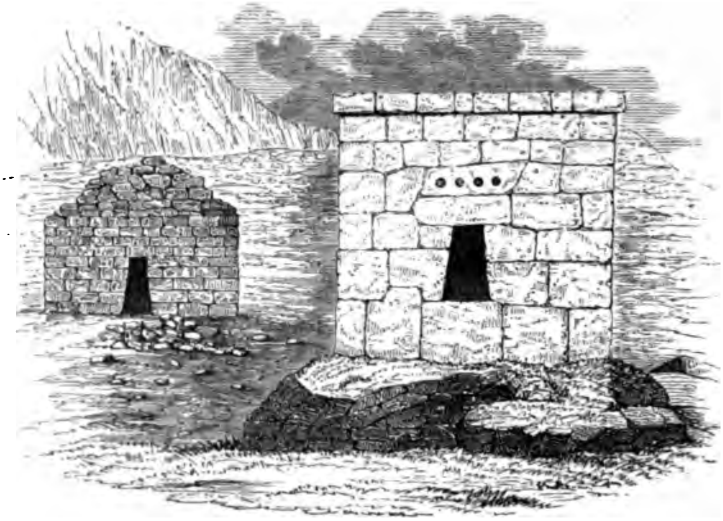
A more advanced specimen of building, though inferior in masonry, is the two-storeyed edifice called the House of the Nuns, or of the Virgins of the Sun, in the same place (Woodcut No. 1011). It is nearly square in plan, though with low projecting wings on one side, and is divided into twelve small square rooms on the ground-floor, and as many similar rooms above them. Several of these chambers were surrounded by others, and those that had no doors externally had no openings like windows (except one with two slits in the upper storey); and they must have been as dark as dungeons, unless the upper ones were lighted from the roof, which is by no means improbable. The most striking architectural features they possess are the doorways, which exactly resemble the Etruscan, both in shape and mode of decoration. We are able in this case to rely upon the accuracy of the representation, so that there can be no doubt of the close similarity.



1011. House of the Virgins of the Sun. (From a Sketch by J. B. Pentland.)

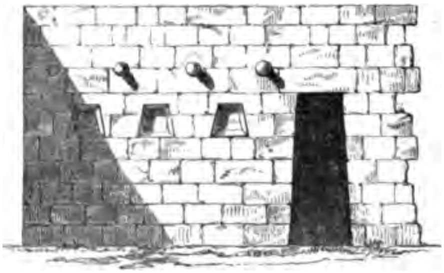
Another building on the island of Coata, in the sacred lake of Titicaca, is raised on five low terraces, and surrounds three sides of a courtyard, its principal decoration being a range of doorways, some of them false ones, constructed with upright jambs, but contracted at the top by projecting courses of masonry, like inverted stairs, in this instance, however, only imitative, as the building is of rubble.

The masonry of the principal tomb represented in the Woodcut No. 1012 may be taken as a fair specimen of the middle style of masonry; less rude than that of the house of Manco Capac, but less perfect than that of many subsequent examples. It is square in plan —a rare form for a tomb in any part of the world—and flat roofed. The sepulchral chamber occupies the base, and is covered by a floor, above which is the only opening. The other tomb in the background is likewise square, but differs from the first in being of better masonry, and having been originally covered, apparently, with a dome-shaped roof either of clay or stucco. Some of these tombs are circular, though the square form seems more common, in those at least which have been noticed by Europeans.



1012. Peruvian Tombs. (From a Drawing by J. B. Pentland.)

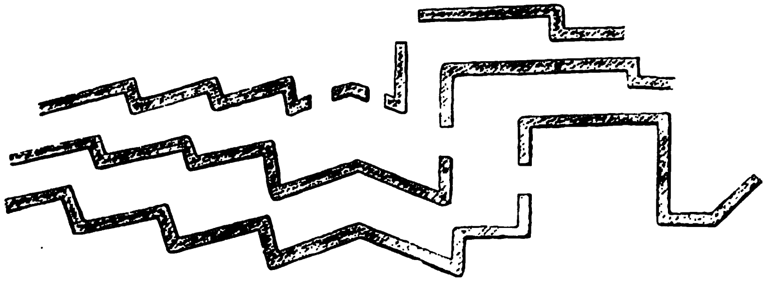
A specimen of the perfected masonry of the Peruvians is represented in the Woodcut No. 1013. It is a portion of the wall of a Caravanserai, or *Tambos*, erected by the last Incas on the great road they made from their oldest capital, Cuzco, to Sinca. The road was itself perhaps the most extraordinary work of their race, being built of large blocks of hard stone, fitted together with the greatest nicety, and so well constructed as to remain entire to the present day in remote parts where uninjured by the hand of man.



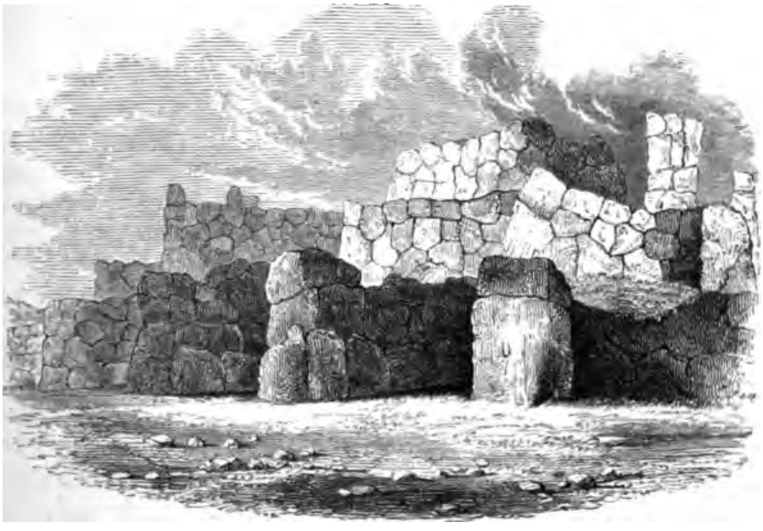
1013. Elevation of Wall of Tambos. (From Humboldt's 'Atlas Pittoresque.')

The masonry here, as will be observed, is in regular courses, and beautifully executed, the joints being perfectly fitted, and so close as hardly to be visible, except that the stones are slightly convex on their faces, something after the manner of our rustications.

Intermediate between the two extremes just mentioned are the walls of Cuzco, the ancient capital of the kingdom, forming altogether the most remarkable specimen now existing of the masonry of the ancient Peruvians. They are composed of immense blocks of limestone, of polygonal form, but beautifully fitted together; some of the stones are 8 and 10 ft. in length, by at least half as much in width and depth, and weigh from fifteen to twenty tons; these are piled one over the other in three successive terraces, and, as may be seen from the plan, are arranged with a degree of skill nowhere else to be met with in any work of fortification anterior to the invention of gunpowder. To use a modern term, it is a fortification *en tenaille;* the re-entering angles are generally right angles, so contrived that every part is seen, and as perfectly flanked as in the best European fortifications of the present day.



1014. Sketch Plans of Walls of Cuzco. No scale.



1015. View of Walls of Cuzco. (From a Sketch by J. B. Pentland.)

It is not a little singular that this perfection should have been reached by a rude people in Southern America while it escaped the Greeks and Romans, as well as the Mediæval engineers. The true method of its attainment was never discovered in Europe until it was forced on the attention of military men by the discovery of gunpowder. Here it is used by a people who never had, so far as we know, an external war, but who, nevertheless, have designed the most perfectly planned fortress we know.

Between these various specimens are many more, some less perfect than the walls of Cuzco, showing greater irregularity in the form, and a greater admixture of large and small stones, than are there found; others, in which all the blocks are nearly of the same size, and the angles approach nearly to a right angle. Examples occur of every intermediate gradation between the house of Manco Capac (Woodcut No. 1010) and the Tambos (Woodcut No. 1013), precisely corresponding with the gradual progress of art in Latium, or any European country where the Cyclopean or Pelasgic style of building has been found. So much is this the case, that a series of examples collected by Mr. Pentland from the Peruvian remains might be engraved for a description of Italy, and Dodwell's illustrations of those of Italy would serve equally to illustrate the buildings of South America.

From what has been said above, it seems by no means improbable that at some future time we may be able to trace a connection between the styles of architecture existing in Central America and those on the eastern shores of the Old World; but, for the present at least, that of Peru must be considered as one of the isolated styles of the world. At the same time it must be confessed that no style offers more tempting baits to those who are inclined to speculate on such a subject. The sloping jambs, the window cornices, the polygonal masonry, and other forms, so closely resemble what is found in the old Pelasgic cities of Greece and Italy, that it is difficult to resist the conclusion that there may be some relation between them. Either, it may be argued, men in certain circumstances do the same things in the same manner, as instinctively as bees or beavers, or by some means or other the arts of the Old World have been transferred to the New. In the present instance, at all events, the latter view can hardly be sustained. The distance of 2000 years in time that elapsed between the erection of the European and American examples is too great to be easily bridged over, and the distance in space is a still more insuperable objection. Even, however, if it were attempted to explain these away, the introduction of the Aymara style is in itself sufficient to settle the question. If that style preceded that of the Incas, as there is every reason to believe it did, it cuts across any such speculations. Its jambs are perpendicular, its angles rigidly rectangular, its surfaces smooth, and it is altogether as unlike the style that succeeded it as can well be conceived. We seem, therefore, forced to the conclusion that the sloping jambs of Inca architecture are only a natural expedient for shortening the length of the lintel, and their polygonal masonry probably arose from the surfaces of cleavage or fracture, into which certain kinds of stones naturally split.

Although, therefore, we are unable, with our present knowledge, to trace the external relation of the Peruvians to the other races of the American continent, there can be no doubt that when her architectural remains are properly investigated, we shall understand her history, and be able to assign to her civilisation its proper rank, as compared with that of other nations. Eventually, also, we need not despair of being able to determine whether the gentle subjects of the Incas belonged to the Polynesian, or to which other of the great families of mankind.

When, indeed, we look back on the progress that has been achieved in the last few years, it seems difficult to assign a limit to the extent to which architecture may be employed in investigations of this sort. It was not, of course, even possible to rise to the conception of such a scheme for tracing the affinities of mankind, till the greater part of the world had been explored, and a sufficient amount of knowledge attained to render it certain that no such exceptions existed as would invalidate the general conclusions arrived at. Now, however, that this has been done, and that we are enabled to survey and to group the whole, it may safely be asserted that the great stone book on which men of all countries and all ages have engraved their thoughts, and to which they have committed their highest aspirations, is, of all those of its class now open to us, the most attractive, and for some purposes the most instructive. No one who has followed the inquiry can well doubt that in a few years more, architectural ethnology will take its proper rank as one of the most important adjuncts to all inquiries into the affinities and development of the various families of mankind.

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